

# Trinidad and Tobago

## Selection, Change, and Discontinuation of Contraceptive Methods in Trinidad and Tobago

Norma Abdulah

Institute of Social and Economic Research  
University of the West Indies

The Population Council



Demographic and Health Surveys  
Institute for Resource Development/Macro Systems, Inc.

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**Norma Abdulah**

**Institute of Social and Economic Research  
University of the West Indies  
St. Augustine, Trinidad**

**Demographic and Health Surveys Further Analysis Series**

**Number 4**

**March 1990**

## PREFACE

The Demographic and Health Surveys (DHS) Program was initiated in September 1984 and designed as a follow-on to the World Fertility Survey (WFS) and Contraceptive Prevalence Surveys (CPS). The objectives of the program include the expansion of the international population and health data base in Africa, Asia, and Latin America to assist in policy formulation and implementation and the development of skills and resources in survey design and analysis among those working in the program.

With funding provided by the U.S. Agency for International Development, DHS is implemented by the Institute for Resource Development/Macro Systems, Inc. and the Population Council, a major subcontractor. The Population Council, an international nonprofit organization established in 1952, undertakes social and health science programs and research relevant to developing countries and conducts biomedical research to develop and improve contraceptive technology. The Council provides advice and technical assistance to governments, international agencies, and nongovernmental organizations, and it disseminates information on population issues through publications, conferences, seminars, and workshops.

The Population Council was responsible for the establishment, funding, and provision of technical assistance to as many as 25 further analysis studies, in countries where DHS surveys were conducted during the years 1986 and 1987. The studies focus on one or more of the topics covered in the DHS, such as fertility, contraception, maternal and child health, breastfeeding, marriage, and fertility preferences; their interrelationships, for example, the effects of the proximate determinants of fertility and the determinants of contraceptive use or child survival; and their correlation with background variables. Although the principal source of data is the DHS survey, comparisons with previous WFS, CPS, or other surveys in order to examine trends over time are included in some of the studies.

Information on the DHS Program can be obtained by writing to: DHS Program, IRD/Macro, 8850 Stanford Boulevard, Suite 4000, Columbia, Maryland 21045, USA (Telephone: 301-290-2800; Telex: 87775; Fax: 301-290-2999). For copies of the studies published in the DHS Further Analysis series, which are listed on the last page, write to the DHS Program, The Population Council, One Dag Hammarskjold Plaza, New York, New York 10017, USA.

## ABSTRACT

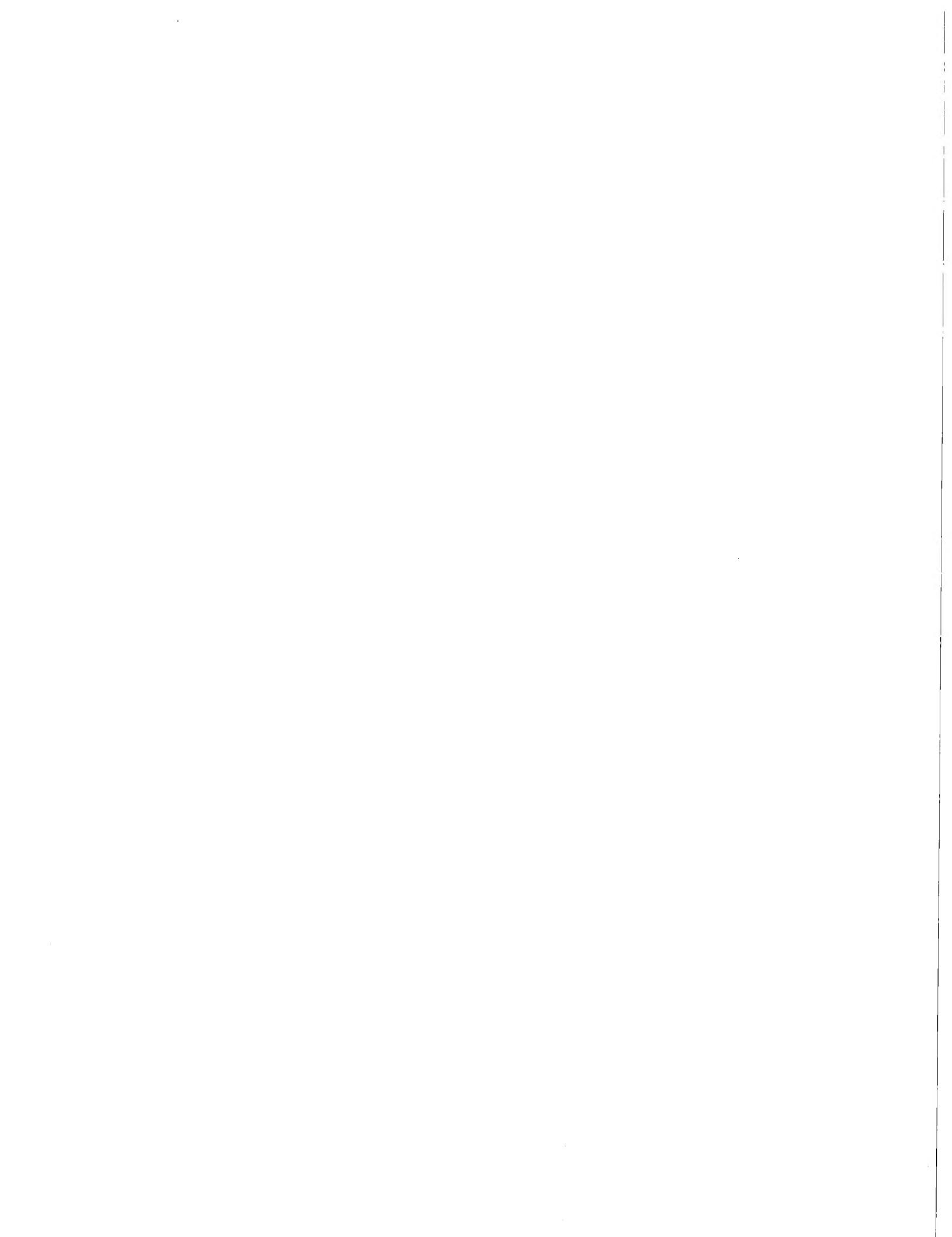
As a result of Trinidad and Tobago's migration history, the contemporary population enjoys a large measure of heterogeneity. The two main ethnic groups--persons of Indian and of African descent--together account for 82 percent of the population. Diversity of culture, including religion and patterns of family formation, remain. The paper explores the extent to which the use of contraceptives generally, the choice of specific methods, and the shifting and/or discontinuation of these methods vary according to the demographic characteristics of the women.

Current age had an overwhelming impact on the selection of specific methods, although the contraceptive pill and the condom remain the two most widely used methods in all age groups except the youngest, among whom withdrawal was very popular. Method shifting is also highest among the 15-19 age group. The impact of education on method selection appears minimal. There is also no real difference according to education in the incidence of contraceptive drop-out, but method shifting is higher among the more educated and younger group. The pill and the rhythm method are more popular among urban women, who are more prone to method shifting than rural women.

## ACKNOWLEDGMENTS

As always, I have received the support of the staff of the Institute of Social and Economic Research in the preparation of this report and, once again, I wish to record my gratitude to them.

The processing of the data presented innumerable difficulties, not least of which was the unexpected loss of direct access to the personal computer referred to in the project proposal. Access to alternative hardware with the required capacity was problematic. In these circumstances, I must acknowledge the importance of the part played by Dr. Philbert Morris, Senior Lecturer in the Mathematics Department of the University of the West Indies at St. Augustine, Trinidad, who, with the assistance of Ms. Joanne Bedasie, completed the tabulations used in this report.



## **GLOSSARY**

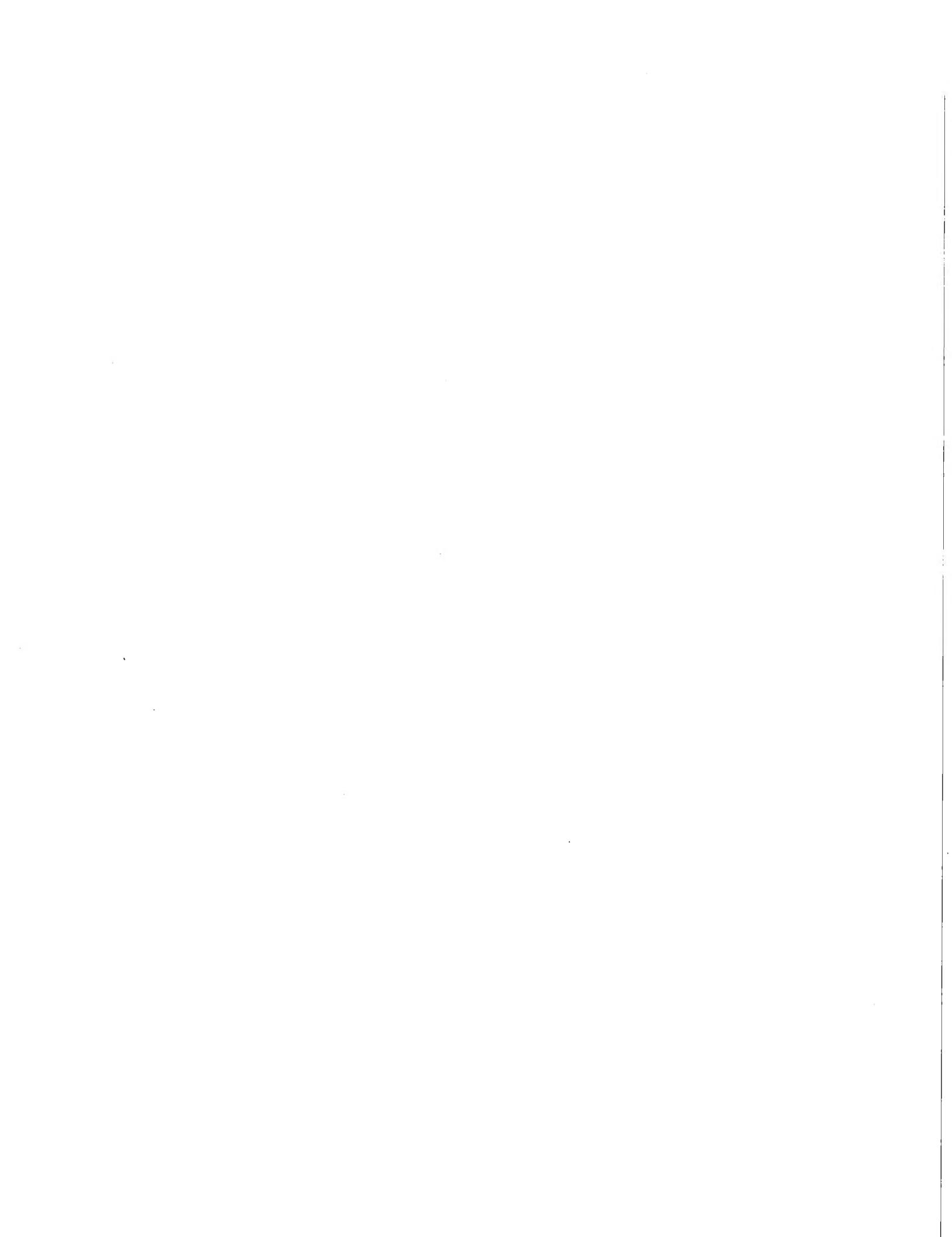
<b>FPA</b>	- Family Planning Association
<b>IPPF</b>	- International Planned Parenthood Federation
<b>AFLC</b>	- Archdiocesan Family Life Commission (formerly Catholic Marriage Advisory Council; see CMAC)
<b>CMAC</b>	- Catholic Marriage Advisory Council (renamed Archdiocesan Family Life Commission; see AFLC)
<b>TFR</b>	- Total Fertility Rate
<b>TTDHS</b>	- Trinidad and Tobago Demographic and Health Survey (see DHS)
<b>DHS</b>	- Demographic and Health Survey
<b>IRD</b>	- Institute for Resource Development
<b>ECLAC</b>	- Economic Commission for Latin America and the Caribbean, Sub-regional Headquarters for the Caribbean
<b>ISER</b>	- Institute of Social and Economic Research, The University of the West Indies
<b>CSSP</b>	- Continuous Sample Survey of Population
<b>TTFS</b>	- Trinidad and Tobago Fertility Survey
<b>KAP</b>	- Knowledge, Attitude, and Practice of Birth Control
<b>WFS</b>	- World Fertility Survey
<b>IUD</b>	- Intrauterine Device
<b>Vaginal Methods</b>	- Include Diaphragm, Foam, Jelly, Cream, and Foaming Tablets
<b>Permanent Methods</b>	- Male and Female Sterilization
<b>Modern Methods</b>	- Include Pill, IUD, Injections, Vaginal Methods, Condom, Male Sterilization, and Female Sterilization
<b>Traditional Methods</b>	- Include Abstinence, Withdrawal, and Other (Mainly Folk) Methods
<b>Supply Methods</b>	- Include Pill, Condom, Vaginal Methods
<b>Clinic Methods</b>	- Include IUD, Injections, Male Sterilization, and Female Sterilization
<b>AIDS</b>	- Acquired Immune Deficiency Syndrome



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## I. BACKGROUND

### An Historical Perspective

The Republic of Trinidad and Tobago consists of two main islands and a number of smaller islands, which form part of a chain of islands in the Caribbean Sea. Trinidad, the larger of the two main islands, is geographically and geologically part of the South American continent, separated from the mainland by the Gulf of Paria. There is a great difference in the history of the two islands after their discovery by Columbus on his third voyage in 1498. Trinidad remained Spanish until 1797, when it was captured by the British and became a Crown Colony in 1802. During the three-hundred year period of Spanish rule, disappointed that there was no gold as reported, the Spanish did little to develop the island. Two of the main features of this period were the decimation of the native Amerindian population and the encouragement of large-scale immigration of French planters and their slaves from neighboring French Caribbean islands from 1783.

During this period, the history of Tobago was extremely turbulent, with the British, French, Dutch, and Spanish fighting for sovereignty over the island. Tobago was captured by the British in 1763 and administratively joined to Trinidad in 1889. The twin-island state developed constitutionally from full adult franchise in 1956 to independence in 1962 and became a Republic within the Commonwealth of Nations in 1976.

As Harewood points out, "the predominant determination of population growth in Trinidad and Tobago, as in the rest of the Caribbean, was the sugarcane plantation."<sup>1</sup> Trinidad was, however, a late entrant to the cultivation of sugarcane, and the planters faced a shortage of unskilled labor for work on the plantations because of the abolition of the slave trade in 1807, followed by the emancipation of the slaves in 1834. The principal population policy objective was, therefore, to import an adequate work force to replace the slaves. Efforts were made to attract immigrants from Ireland and Scotland, Europe, China, and even Amerindians from South America. Lack of success with attracting white settlers led to a decision to attract immigrants from India under terms of indentureship.

There were other immigrant streams. For example, the discovery of oil in commercial quantities in 1910 resulted in large numbers of persons from the neighboring islands coming in search of employment in the oilfields in the period 1931-1946. The demand for labor during the war years, with the building of military bases for the United States of America, also attracted immigrants from these islands. The post-war period saw a decline in net immigration and, since the early 1950s, the country has experienced a negative net migration balance--the population loss through net emigration has been and continues to be substantial and growing.

The frequent changes in colonizers and immigrant streams have had a profound effect on the composition of the population. Religious diversity, differing patterns and rates of family formation associated with a variety of ethnic groups are still a feature of the society, although there are now two predominant ethnic groups: those of Indian descent and those of African descent. These two groups are more or less equal in number and together account for over 80 percent of the entire population. The study sets out to explore whether the heterogeneity of the population has influenced contraceptive method choice and continuation of use among the women of this country.

### The National Family Planning Programme

The first family planning clinic was opened privately in Point Fortin, an oilfield town in south Trinidad. Following this, small private clinics were opened in rural areas wherever premises could be obtained. However, these small clinics all operated for a short time and then died for lack of community support. Even the first clinic at Point Fortin became inactive when the founders were transferred out of the area.

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<sup>1</sup> See Harewood, 1973.

Organized family planning first moved into the major urban areas in 1959 when a clinic was started in Port of Spain, the capital city. By 1961, a Family Planning Association (FPA) was established and became a member of the International Planned Parenthood Federation (IPPF), its constitution being approved at the Western Hemisphere Regional Conference of the IPPF in Barbados in April 1961. In 1962, the FPA started a second clinic in San Fernando, the second major town of the country.

In 1967, the Government instituted a National Family Planning Programme with one of its main objectives being to reduce the crude birth rate from 28 per 1,000 to under 20 per 1,000 by the year 1977. The Government also established the Population Council of Trinidad and Tobago to advise on family planning matters and to coordinate all family planning activities in the country. The Council included representatives of the FPA and the Catholic Marriage Advisory Council, recently renamed the Archdiocesan Family Life Commission (AFLC), as well as representatives of various government departments and interested private organizations.

There was continued expansion in the work of the two voluntary organizations while the government programme also increased the number of clinics it operated. By agreement, by 1970 the Government Programme had absorbed most of the FPA clinics, and family planning activities became just one of the concerns of the government health clinics. At present, the government offers family planning services at 95 health centers, the FPA operates two clinics, and the AFLC provides instructions on natural family planning at 10 facilities. Contraceptive services and supplies are therefore readily available throughout the entire country.

### Similar Studies

Research into contraceptive use, nonuse and its determinants is not new to the Caribbean region. In fact, some of the earliest studies were carried out in this part of the world. In the 1950s and early 1960s, Trinidad and Tobago was held as an example to other Third World countries, as one country which had succeeded in reducing its birth rate in record time. More recent studies in the region have tended to concentrate on the socioeconomic factors, which affect contraceptive use and their effects on population growth.

In a study carried out in 1971 on "Changes in the Use of Birth Control Methods," Harewood found that 47 percent of women who had ceased use of certain methods gave as their reason "being dissatisfied with the method."<sup>2</sup> These included 19 percent, for whom the reason given was that the method was "uncomfortable" or "too much trouble," 11 percent in which it made the respondent ill, and 8 percent where the partner disliked the method. Harewood also noted a high and increasing level of "drop-outs" between 1968 and 1970.

A similar study carried out by Jack Reynolds in 1971 on a small sample of drop-outs from family planning programmes in Trinidad and Tobago identified seven major reasons for this phenomenon. These were: inconvenience, quality of service, the experience of side effects, fear of side effects, objections of and advice from others, diminished need, and no special reason.

Abdulah and Harewood, in a 1984 study, found that the greatest contributor to the difference between the total fertility rate (TFR) and the natural fertility rate was contraceptive use.<sup>3</sup> The present study hopes to proceed in filling some of the gaps in our understanding, by examining how patterns of method selection, change and discontinuation vary; and whether motivational factors related to nonuse of contraceptives vary according to the background characteristics of the women. It is especially important in the light of rising crude birth rates coupled with the deteriorating economic situation, which have increased the authorities' anxiety to identify new target groups for contraceptive use and to understand their motivation for nonuse of contraceptives.

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<sup>2</sup> See Harewood, 1973, p. 33.

<sup>3</sup> See Abdulah and Harewood, 1984, p. 35.

## Source of Data

The Trinidad and Tobago Demographic and Health Survey (TTDHS) was undertaken in the latter half of 1987 under the auspices of the Westinghouse Public Applied Systems, now known as the Institute for Resource Development, Inc. The executing agency was the Trinidad and Tobago Family Planning Association. The data which emerged from this survey are those on which this paper is based.

The sample selected for the TTDHS Survey was a sub-sample of the Continuous Sample Survey of Population (CSSP), which is administered quarterly by the CSO. The CSSP design is a two-stage sample. At the first stage, primary sampling units are enumeration districts selected systematically, with probability proportional to size. All households in the selected enumeration districts are listed, and the sample is systematically selected with an inverse probability. A total of 4,799 households were thus selected, yielding 3,806 completed interviews among women aged 15-49 years.

Information on contraceptive use was collected with reference to two separate time frames, after the establishment of the major ever-use/never-use dichotomy. For current contraceptors, the reference period was the open interval, and women were asked to indicate the method currently in use and the length of use of that method, any problems experienced in the use of that method, any other methods concurrently in use, use of a previous method, length of use of that method before switching to the current one, and the main reason for discontinuing the use of the previous method. Non-contraceptors who had practiced contraception in the open interval provided information on the last method used; and women who had not used a contraceptive method in the open interval were asked about their intentions to practice contraception in the future.

The second reference point for women was the five-year period prior to the survey. Those who had had any live births or were currently pregnant were asked to provide information on contraceptive use in the closed intervals during this period. The data provided here were similar to those collected for current contraceptors: last and previous methods (where applicable), length of use of the last method, and main reason for stopping its use. Also, a specific question was asked concerning the use of a method at the time that the respondent became pregnant and fertility preferences at the time of each conception.

In this paper, data relating to current use of contraceptive methods have been used to study method mix. For the analysis of method shifting and discontinuation, data relating to the five years preceding the survey or to the last closed and open intervals combined have been used.

## Characteristics Used in the Analysis

Previous studies have shown that several socio-demographic characteristics of the women are associated with the level of use of contraception. The purpose of this study is to examine whether these characteristics also affect the choice of contraceptive method, the incidence of method shifting and the length of use, and reasons for discontinuing the use of the method selected. The characteristics used throughout the analysis are:

(a) Age: For the most part, five-year age groups have been used. In a few instances, the tyranny of small numbers determined the use of a simple dichotomy (under 30, 30+).

(b) Education: Unevenness of distribution of the women, according to level of education precluded too fine a breakdown, if a large number of empty cells were to be avoided. Therefore, a two-way breakdown into primary or less and secondary or more has been used.

(c) Residence: Urban and rural are the two categories used to indicate residence throughout this study. But the division of the country according to level of urbanity has always been difficult and is a problem, which has arisen at the time of planning each of the four post-war Censuses taken in this country. Furthermore, there have been a large number of housing and business developments in the past twenty years, which have grown up in what would earlier have been obviously rural areas along with some measure of decentralization of administrative offices. So that areas are constantly changing their characteristics and classification should also be subject to frequent updates. In the DHS Final Report, the areas classified as "urban" comprise the capital

city of Port of Spain, the City of San Fernando, Boroughs of Arima, and Point Fortin. All other areas are included as rural areas, even a large number of small towns and other areas with mainly urban characteristics. In this study, the urban/rural division as used in the DHS report has been used.

(d) Ethnicity: It was noted earlier that Indians and Africans are approximately equal in number in the country, each of these two ethnic groups accounting for 41 percent of the total population in the 1980 Census of Population. The rest are divided between 16 percent mixed and 2 percent other ethnic groups. Culturally, the mixed population is more akin to Africans than to Indians, and it is usual for demographic researchers to group all non-Indians together. This has been done for this study, and a two-way classification has been used: Indian and non-Indian.

(e) Union Status: In most countries of the world, the study of fertility is limited to married or ever-married women. In the Caribbean, however, a large proportion of births take place to women, who are not legally married to their partners. For this reason, demographers and other researchers have identified three types of union for the study of fertility and mating. These are:

1. Marriage in which the partners are legally married and living together;
2. common-law unions, in which the woman and her partner live together as man and wife but are not legally married; and
3. visiting unions, in which the woman and her partner do not live in the same house but have regular sexual relations which could lead to conception.

A fourth group, those who do not have a current partner but who have previously been in a union, are identified as "no longer in union." In a few subsections, some other characteristics are used as appropriate. These are religion (a four-way distribution), number of live-born children, and number of previous partners.

The DHS survey did not make any serious attempt to collect data on the economic activity of women. This is regrettable for previous research has shown a positive association between women's work outside of the home and the practice of contraception generally, as well as with the choice of specific methods.<sup>4</sup>

#### **Comparison with Data from Previous Surveys**

Two fertility/family planning surveys have previously been conducted in Trinidad and Tobago: a KAP-type survey in 1970/71 and a fertility survey in 1977 under the aegis of the World Fertility Survey Organization, the Trinidad and Tobago Fertility Survey (TTFS).

For a number of reasons, the data obtained from these two surveys and the DHS are not strictly comparable and severely limit the assessment of change, which would otherwise have been possible. First, the 1970 survey covered women 15-44 who were not full-time students at a primary or secondary school, while the 1977 survey used the same criteria for eligibility but extended the age coverage to 15-49 years. The 1987 DHS, on the other hand, included all women 15-49 years i.e., it did not exclude students. Secondly, data on contraception in the KAP survey included information on ever-use for non-students ever in a union and on current use for exposed non-students. The DHS gave information on both ever-use and current use for all women and women currently in a union (See Tables 1.1 and 1.2).

From the TTFS, information is available on ever-use for non-students ever in a union, and on current use for exposed non-students i.e., non-students currently in a union and at risk of becoming pregnant, thus omitting women who were already pregnant and those who were subfecund.

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<sup>4</sup> See, for example, Abdulah and Singh, 1984.

For this brief comparative analysis, we shall consider ever-use of contraception among all women, and current use among women currently in a union. Adjustments have been made to the KAP and TTFS surveys, by adding to the base population the number of women never in a union to arrive at proportions of all women who ever used contraception, as shown in the DHS. However, since no information is available on the number of students in the 15-19 year age group, the comparison is confined to women 20 years of age and above.

Among women 20-44 years of age, ever-use increased substantially between 1970 and 1977 but remained unchanged between 1977 and 1987. The increase, which was least between 1970 and 1977, i.e., for the 20-24 age group, was still twice the comparable increase between 1977 and 1987. For the 35-44 age group, a substantial increase of 18 percentage points in the proportion ever using contraceptives was followed by a very modest increase of just 5 percentage points in the following decade. In the 25-29 and 30-34 age groups, the level of use actually declined slightly between 1977 and 1987, after increases of 17 and 13 percentage points respectively in the earlier seven-year period.

Data on ever-use of specified methods are given in the reports of each of the surveys, but the varying classifications by age preclude a comparison of data from all three surveys except for the 30-34 age group. Table 1.3 therefore relates to women aged 20-49 in the 1977 and 1987 surveys and shows the percentage of all women who have ever used any method, any modern method, and specific contraceptive methods, by age.

The level of ever-use of any method and of any modern method was highest for the 30-34 year group in 1987 as in 1977. Because of a slight decline in ever-use for the 25-29 group, this age group, which had the second highest level of ever-use in 1977, was relegated to fourth place by 1987, having been exceeded by the 35-39 and 40-44 age groups. There was no increase in ever-use in the 25-29 and 30-34 age groups between the two surveys. In all other age groups, however, there was an increase in ever-use, the difference increasing with age. There seems to have been some underreporting of ever-use among older women in 1987. It will be noted, for example, that 44 percent of women 35-39 years in 1977 reported having used the condom and 30 percent had used withdrawal. Ever-use of these methods by the 45-49 age group in 1987 was recorded as 32 and 20 percent, respectively.

The pill, the condom, and withdrawal were the three most widely used methods among all age groups. Between both surveys ever-use of the pill increased in every age group except the 25-29 group, while an increase in ever-use of the IUD and the contraceptive injection was common to all age groups except women aged 45-49, among whom there was no change in the level of use of the injection.

The condom, the second most popular method, declined in ever-use in all age groups up to 34 years, and increased substantially within the older groups. The level of ever-use of withdrawal declined for women 30-39, increased slightly for the 20-24 age group, and remained about the same for all other age groups, however, use of the safe period declined in all age groups under 45 years.

The DHS report does not permit an in-depth comparison with the TTFS, nor do the reports of the three surveys provide data that would allow for a meaningful assessment of change in current use over the whole period, even for some general population. For example, as indicated above, comparison of the level of current use must be confined to women 20-44 years of age, between the years 1970 and 1987, and between 1977 and 1987 by selected characteristics of the women (Table 1.5). Comparison of use of specific methods can only be carried out for three broad age groups and between 1977 and 1987 (Table 1.4).

Between 1970 and 1987, the proportion of women 20-44 years of age and currently in a union, who were currently contracepting increased by nearly one-half—from 36 to 55 percent. Unlike ever-use where the increase was least among women 20-24 years of age, the increase in current use was greatest for this age group. It is interesting to note that in 1970 the level of current use among women in the 20-24 year group was very much lower than among older women. By 1987, differential increases resulted in a level of use, which was very nearly the same for all age groups between 20 and 44 years.

Between 1977 and 1987, there was a small increase in the overall level of current use, from 51.3 percent to 52.7 percent. There was no increase in the proportion of women in union aged 25-34 who were using any method, and a slight decrease in the proportion using a modern method. For women in the 35-44 and 45-49 age

groups, however, there were appreciable increases in the level of contraceptive use generally, and in the use of modern methods in the ten-year period.

In the 25-34 age group, while the use of the pill and the condom far surpassed the use of any other method in both 1977 and 1987, both of these methods sustained losses in usage, while the use of female sterilization showed a comparatively large proportional increase. The use of withdrawal almost doubled.

Among women 35-44, the use of the pill declined by some 40 percent, whereas the condom showed no change. There was a substantial increase in the use of female sterilization--from 9.3 to 16.0 percent and much smaller increases in the use of all other methods except the contraceptive injection, for which usage remained nil. In both 1977 and 1987, use of the condom in this age group exceeded use of the pill.

Methods showing a decline in use by the age group 35-44 years, are: the pill, withdrawal, and other folk methods. Increases in proportions were noted for female sterilization, the use of which more than doubled, the IUD, and condom. Changes in the level of contraceptive use among the various demographic subgroups shown in Table 1.5 were not generally significant, except for increases in contraceptive use among the 45-49 age group, Indians (this was sufficient to reverse the relative positions of the two ethnic groups), and Hindus; and a 6-percentage point decline among the less educated group.

In summary, while the comparison and measurement of change in contraceptive use at the three survey dates must necessarily be limited, it is clear that in the 1977-1987 decade, use had remained more or less constant among women 25-34 and increased somewhat for older and younger women, after a general and substantial increase in all age groups between 1970 and 1977.

## II. METHOD SELECTION

It should be emphasized at the outset that method selection in Trinidad and Tobago--and no doubt in most other countries--does not necessarily imply one hundred percent free choice by the women. The selection of a method is circumscribed by the types of supplies and services available at family planning and health clinics, as well as by advice from private doctors, who may recommend a particular method because of the women's medical history or by the doctor's own personal preference. Advice from partners, relatives, and friends may also play a part in determining which method a woman uses, while many women have adopted a philosophical position against the use of specific methods.

Supplies and services for all the modern methods identified in the Demographic and Health Survey and in this study, are available at the Family Planning Association clinics at little or no cost. These include: the oral contraceptive, condoms, foams, and jellies, the IUD (loop), injections, the diaphragm, and male and female sterilization. The situation at the 95 government health clinics is in direct contrast to that of the FPA. For the past two years, only oral contraceptives and condoms are offered at these official outlets and all of these have been made available by the FPA, through the Population Programme Unit of the Ministry of Social Development and Family Services. Indeed, during the first quarter of 1989 alone, the FPA have made available to the Unit as many as 864,000 condoms.

One might expect the availability of supplies to affect the selection of contraceptive methods--and the limited choice offered at the government clinics might well offer a partial explanation for the very much higher levels of use of the condom and the pill than of other methods. However, it should be remembered that these two methods were also the most widely used in both 1970 and 1977, when financial constraints did not prohibit the provision of other contraceptive supplies and services to the clinics.

The Trinidad and Tobago, the DHS Survey did not seek to discover the reasons why women used specific contraceptive methods. It is therefore impossible to assess the importance of free choice vs. coercion in method selection. Nevertheless, there is some measure of free choice, even if it is less than complete and use of specific methods does vary between demographic subgroups. In this section, we examine the variations in ever-use and

current use of these methods as well as method preference for future use, by women who were not practicing contraception at the time of the survey.

### **Ever-use of Contraception**

The women who have ever practiced contraception represent 82 percent of all women who have ever been in a union and 63 percent of all respondents in the survey, indicating a high level of contraceptive acceptance among the women of Trinidad and Tobago. Such acceptance is widespread among all subgroups.

The proportion of ever-users among all women found in the 15-19 age group was exceptionally small (17 percent), the reason for this being the fact that all but 139 of these 683 young women had never been in a union. By contrast, nearly 90 percent of the older age groups had been in an established union. This difference in union experience is also reflected in the proportions of the two education groups who were ever-users, for while women with only primary schooling appeared to have a much higher level of ever-use than their better educated counterparts, the relative situation is reversed when the younger, better educated women never in a union are omitted from the calculation (Table 2.1). From here on, therefore, data on ever-use of contraception generally, and contraceptive methods specifically, will relate to women ever in a union. Similarly, the study of current use will have as its base population only those who were currently in a union at the time of the survey.

Apart from comparatively low percentages of ever-users among the youngest and oldest groups, the level of ever-use of contraception varies little according to age. This pattern is common to most countries. Also, as would be expected from previous research, ever-use is higher for the more educated women than for their less educated counterparts and higher for urban than for rural women.<sup>5</sup> Women of East Indian descent have had significantly lower contraceptive use experience than non-Indians. Among union status groups, the percentage of ever-users declines progressively from married to common-law to visiting women and is substantially lower for women no longer in a union than for the other three union types. All religious groups have a high level of ever-use with Hindus having slightly lower use rates than the other groups. The differences are not statistically significant.

### **Ever-use of Specific Contraceptive Methods**

Two-thirds of all women who have ever practiced contraception have, at some time, used the contraceptive pill. The condom has been used by more than one-half of them, while withdrawal and vaginal methods have also been fairly widely used. Less than 15 percent of ever-users have used any other method, and less than 1 percent have been in union with a husband or partner who has been sterilized. The greater level of use of the pill, the condom, withdrawal, and vaginal methods than of all other methods is common to all subgroups. However, preferences among particular groups are still apparent. For example, withdrawal has been practiced more among the youngest group, aged 15-19 years, than among any other age group. Indeed, for this age group, the use of withdrawal exceeds even that of the pill, the most widely used method among all other demographic subgroups shown in Table 2.2. Withdrawal has also been used by a large proportion (44 percent) of women in the 20-24 year group.

The general pattern is one of positive association between age and ever-use of the IUD, vaginal methods, periodic abstinence, and, as expected, female sterilization, while the association between age and the practice of withdrawal is negative. The pill, the condom, and injectables have been used more frequently by women in the three age groups between 30 and 44 years than by younger and older women.

Female sterilization has found greater acceptance by the less educated women, reflecting the lower level of education reached by the older women, who comprise most of those sterilized. Other differences according to education in the level of ever-use of specific contraceptive methods are generally small with the pill, injectables, and other (usually folk) methods having the higher percentage of ever-users among women with

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<sup>5</sup> See Abdulah and Harewood, 1984; Central Statistical Office, 1981.

primary education only; while those with secondary or higher education were more prone to have used the condom and withdrawal.

Urban/rural differentials in ever-use of specific methods are generally negligible (2.3 percentage points or less) except in the case of the pill and abstinence, both of these methods having been more widely used by urban than by rural women. Ethnic differentials in method selection have been somewhat more pronounced though still fairly small (less than 5 percentage points), except for vaginal methods and abstinence used more by non-Indians; and the condom for which the greater preference has been among Indian women.

Because many women change their union status during their reproductive years, with the same partner or another, variations in the level of ever-use of specific methods, according to current union status are not germane to the issue and could even be misleading. The association between current use and current type of union will, of course, be explored in the next subsection. But, in general, the conclusion is that while ever-use of contraception varies substantially, according to the characteristics of the women, the level of ever-use of specific methods shows little association with the women's background characteristics, with the exception of age. However, current contraceptive use is likely to give a clearer picture of method selection by particular groups of women and is examined in greater detail in the following subsection.

#### Current Use of Contraception

At the time of the DHS survey, 53 percent of the women currently in a union were practicing contraception. As stated earlier, there has been no real increase in the level of use in a decade, although the method mix has undergone some transformation. For the present section, we will examine first the overall level of current contraceptive use in each of the selected subgroups. The discussion of method mix within each subgroup is then followed by comparisons of the levels of use of clinic methods and supply methods; of modern and traditional; and of permanent and temporary methods. The examination of current use from these various perspectives may not only offer some explanation for the overall lack of improvement in contraceptive practice already referred to but may also assist programme and health planners to identify specific subgroups, which require a concentration of effort in their educational campaigns, and to anticipate the demand for specific supplies and services.

Table 2.3 and Figures 1 and 2 show that the patterns of variation of current use according to age group, education, and urban/rural residence are similar to those which emerged for ever-use by women ever in a union. Thus, the level of current use is lower for the youngest and oldest groups but varies little in the groups between 20 and 44 years, peaking in the 30-34 age group; is somewhat higher among those with secondary or higher education than among their less educated counterparts; and higher for urban than for rural women.

It is of interest to note, however, that while ever-use among non-Indians exceeded that of Indians ever in a union by some 11 percent, current use of contraception by Indians now exceeds that of non-Indians. This is a reversal of the situation found in both previous family planning/fertility surveys in 1970 and 1977 and suggests that contraceptive drop-outs in the last decade have been much greater among non-Indians than among Indians, as will be discussed later.

It is also of interest to note that while married women retain precedence among union status groups in current use, as in ever-use; the current use of contraceptive methods among visiting women is on par with the level of common-law wives instead of being somewhat lower, as was the case with ever-use. (See Figure 2).

It should be mentioned that direct standardization for age, with the distribution of all women currently in union taken as the standard, results in only minor changes in the proportions of each union status group who are current contraceptors and reduces the educational differential by only 11 percent, indicating that age has not contributed materially to the intergroup differentials noted.

Also shown in Table 2.4 and Figure 2 are the proportions of religious and parity groups, who are current contraceptors. Here we note that Hindus, with the lowest level of ever-use, have joined the other non-Christians in having the highest level of current contraceptive use. This is consistent with the reversal of relative

FIGURE 1. PERCENTAGE OF WOMEN IN UNION,  
WHO ARE PRACTICING CONTRACEPTION BY AGE

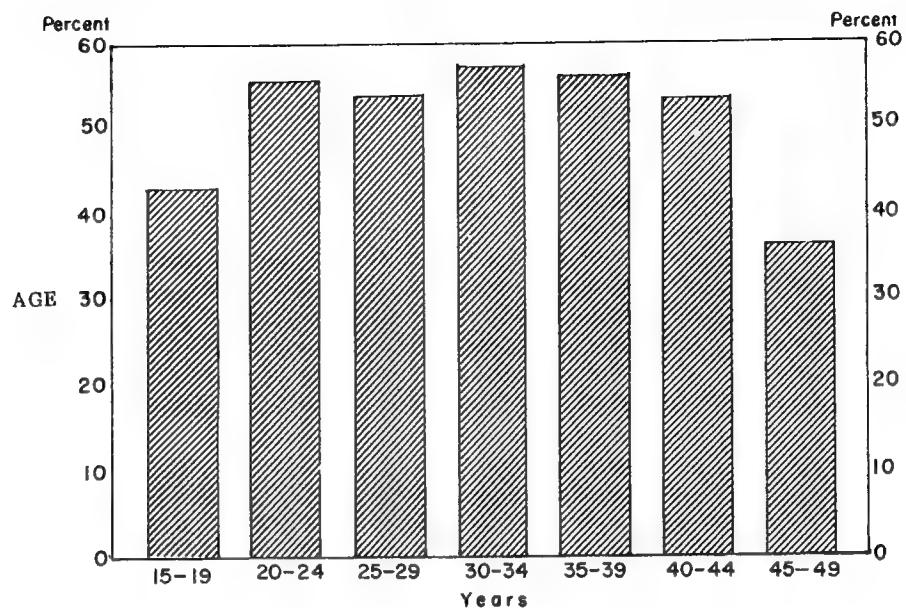
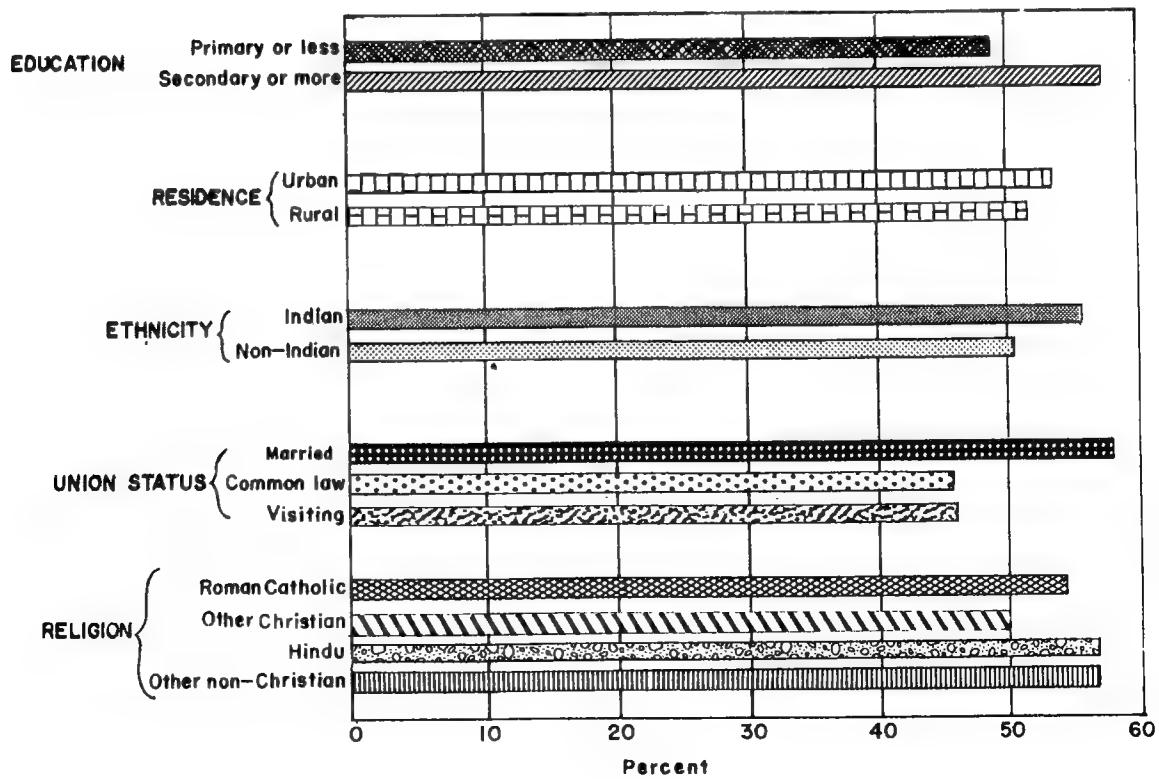


FIGURE 2. PERCENTAGE OF WOMEN IN UNION,  
WHO ARE PRACTICING CONTRACEPTION BY  
SOCIO-DEMOGRAPHIC CHARACTERISTICS



positions of the two ethnic groups, since Indians comprise the great majority of Hindus and other non-Christians. The Roman Catholic group ranks second in level of use, thus retaining its precedence over the other Christian group. The proportion of current users in the parity groups increases from 32 percent of childless women to a maximum of 61 percent among those with three children. The percentage is somewhat lower for women with four or more living children, the majority of whom belong to the older age groups.

#### Current Use of Specific Contraceptive Methods

At the time of the survey, the contraceptive pill was the most widely used method among all subgroups, except those aged 35 and above, rural women, Indians, and married women (Table 2.4). The older women relied more on female sterilization, while the other three exceptional groups preferred the use of the condom. In most subgroups, except for those named above, in which the condom took precedence over the pill, the condom was the second most popular method. Indeed, the only group in which the order of precedence was neither pill/condom or condom/pill was the youngest group, whose use of withdrawal exceeded that of the condom.

These four methods (pill, condom, sterilization, and withdrawal) together accounted for 75 percent of all current users of contraceptive methods; and between 69 and 87 percent of the subgroups. Use of the intrauterine device (IUD) equalled or slightly exceeded 10 percent of users only in the 30-34 and 40-44 age groups, non-Indians, and women with two to four live births; while vaginal methods had a similar level of use among women 25-29 and 35-39 years of age, urban women, non-Indians, common-law women, Roman Catholics, and women with one or more than two live births.

In general, the use of the pill is negatively associated with age (the proportion of women 15-19 was slightly lower than the comparable proportion of the 20-24 group) and with parity. It was higher for the more educated group, urban women, and non-Indians than for their respective counterparts, and most widely used by visiting women (39 percent as against 33 percent of common-law women and only 21 percent of married women). Roman Catholics and the other non-Christian group each had 31 percent of their numbers using the pill, while among other Christians and Hindus, the use of this method was much lower--24 percent.

The proportion of users who selected the condom varied between 20 and 27 percent for each of the age groups, except the youngest and the eldest, among whom proportions were somewhat lower. This method was substantially more widely used among rural women and Indians than among urban women and non-Indians, respectively. Above average use of the condom was also found among married women, Hindus, and other non-Christians, and women with one or two children, but both education groups enjoyed the same level of use of this method.

As expected, the use of female sterilization is positively associated with age and parity, reaching a maximum of 52 percent of users aged 45-49 years, and 40 percent of those with five or more children. There is, of course, some element of contraceptive "redundancy" among users in the oldest and highest parity groups, most of whom would no longer be fecund, and we shall examine its use further, from perhaps more useful perspectives, later in this section.

The incidence of sterilization is very low among the better educated women and the visiting union group, since a large proportion of these two groups are comprised by young women under 25 years of age. Otherwise, the level of sterilization does not vary substantially for the other demographic subgroups, save for a somewhat lower level of use among Roman Catholics than among the other religious groups.

As many as 27 percent of the youngest contraceptors, aged 15-19 years, were using withdrawal at the time of the survey. This is more than twice the overall average and can be explained only by ignorance of this method's low level of effectiveness since, as we have seen, there is easy access to other more efficient methods. The use of withdrawal is also relatively high among childless women, as expected from the above, rural women and Indians, and is somewhat lower among Roman Catholics than among the other three religious groups. The differences between Roman Catholics and other religious groups are not, however, statistically significant.

Among the less frequently used methods, the practice of periodic abstinence increases with age, but age is not associated with the level of use of any contraceptive methods other than those mentioned above. The IUD and periodic abstinence are used slightly more by women with secondary education than by the less educated women, while the position is reversed with respect to the use of vaginal methods. Urban women and non-Indians have higher proportions than rural women and Indians using these three methods. The level of use of the IUD is very low among the "other non-Christian" group, increases with parity up to the three- to four-child group but is comparatively low for women with five or more children. Vaginal methods are used somewhat more widely by common-law women and women with one child than by the other subgroups. Roman Catholics' use of periodic abstinence as their chosen method of contraception is higher than that of the three other religious groups but is still comparatively low (7.5 percent).

### **The Impact of Age on Differential Use of Selected Methods**

As noted earlier, there are variations of use of each of the four most frequently used methods, according to the current age of the women. Thus, a negative association between age and level of use is noted for the pill and a positive association for female sterilization while, on the one hand, the use of the condom was more or less the same for most of the age groups (with a few exceptions) and, on the other hand, the use of withdrawal among the two youngest groups exceeded by far the level of use of the other age groups. It therefore appears appropriate to determine the extent to which differing age distributions of the demographic subgroups account for differentials in use.

Direct standardization for age, with the age distribution of all current users taken as standard, allows the elimination and measurement of the impact of age on the subgroup differentials noted earlier. The age-standardized proportions of each group currently using each of the four most widely used methods are shown in Table 2.5. It is recognized that age-standardized rates have no direct meaning in themselves and are meaningful only in comparison with other similarly adjusted data. Still the percent changes brought about by standardization will give some indication of the impact of age distribution on the proportions using each method. These percent changes are also shown in Table 2.5.

We note first that with the "elimination" of the effects of age, the observed difference according to education in the percentages of users who opted for the pill disappears completely, and the lack of a differential in the use of the condom persists. The proportions using female sterilization and withdrawal are each 44-45 percent higher among women with only a primary education than among the better educated group. The use of female sterilization by this latter group was increased by 31 percent over the level of use indicated by the observed proportions. Age adjustment also resulted in the emergence of a definite ranking of the methods selected by the primary education group (i.e., the pill, followed by the condom and female sterilization in that order), which was not apparent from the observed proportions.

Of the union status groups most affected by the age distribution were visiting women, of whom proportions using the pill and condom were 13 percent less than the unadjusted percentages; while the proportion using female sterilization was 47 percent higher than its unadjusted counterpart. After age adjustment, common-law and visiting women had an almost equal level of use of the pill, the differential declining from 7.9 percentage points (unadjusted) to 2.7 percentage points (adjusted).

Of the religious groups most affected by age distribution were the use of the pill by Hindus, of female sterilization by the other non-Christian group, and of withdrawal by all four groups, especially other Christians and Hindus. The age-standardized proportion of Hindus using withdrawal was 70 percent higher than the observed proportion, while that of other Christians using this same method increased by 45 percent after standardization.

In summary, the impact of age distribution on the level of use of the selected methods shown in the table was very substantial in the use of female sterilization by the secondary education group and visiting union women, as well as in the use of withdrawal by all four religious groups. Less marked was the impact on the use of the pill by both education groups, visiting women, and Hindus; the use of the condom by visiting women; and the acceptance of sterilization by the lower education group, married and common-law women, and other non-

Christians. Age contributed little or nothing to the use of the condom, except in the case of women in visiting unions, as already mentioned.

#### **Types of Methods Selected as Indicators of Motivation to Practice Contraception**

As stated earlier, respondents in the Trinidad and Tobago Demographic and Health Survey were not asked to state their reasons for practicing contraception or, indeed, for their selection of a specific contraceptive method. However, some indication, even if imprecise, of the strength of the motivation to practice contraception may be gleaned from the types of methods they select, as shown in Figure 3.

For example, the use of a permanent method (sterilization) betokens a life-time commitment to cease childbearing, while the choice of a temporary method may suggest that the use of contraception may be for spacing rather than terminating the incidence of child births. Again, a comparatively high proportion of women were currently using traditional methods (periodic abstinence, withdrawal, and other, mainly folk methods) rather than modern methods. Since there is easy access to effective supplies and widespread knowledge of contraceptive methods in all demographic subgroups, this would seem to indicate, at least partially, a less serious approach to contraception among users of these less effective methods. It is, of course, possible that some women may have ideological or philosophical reasons for preferring to use traditional methods. On less firm ground, but possibly also useful, might be the use of supply methods compared with clinic methods, for it may be posited that the use of supply methods i.e., those requiring frequent re-supply (pill, condom, and vaginal methods) as against clinic methods, which require infrequent clinic visits (IUD, injection, male and female sterilization), could indicate a greater willingness to take time and trouble to ensure their protection from conception.

#### **Use of Permanent and Temporary Methods**

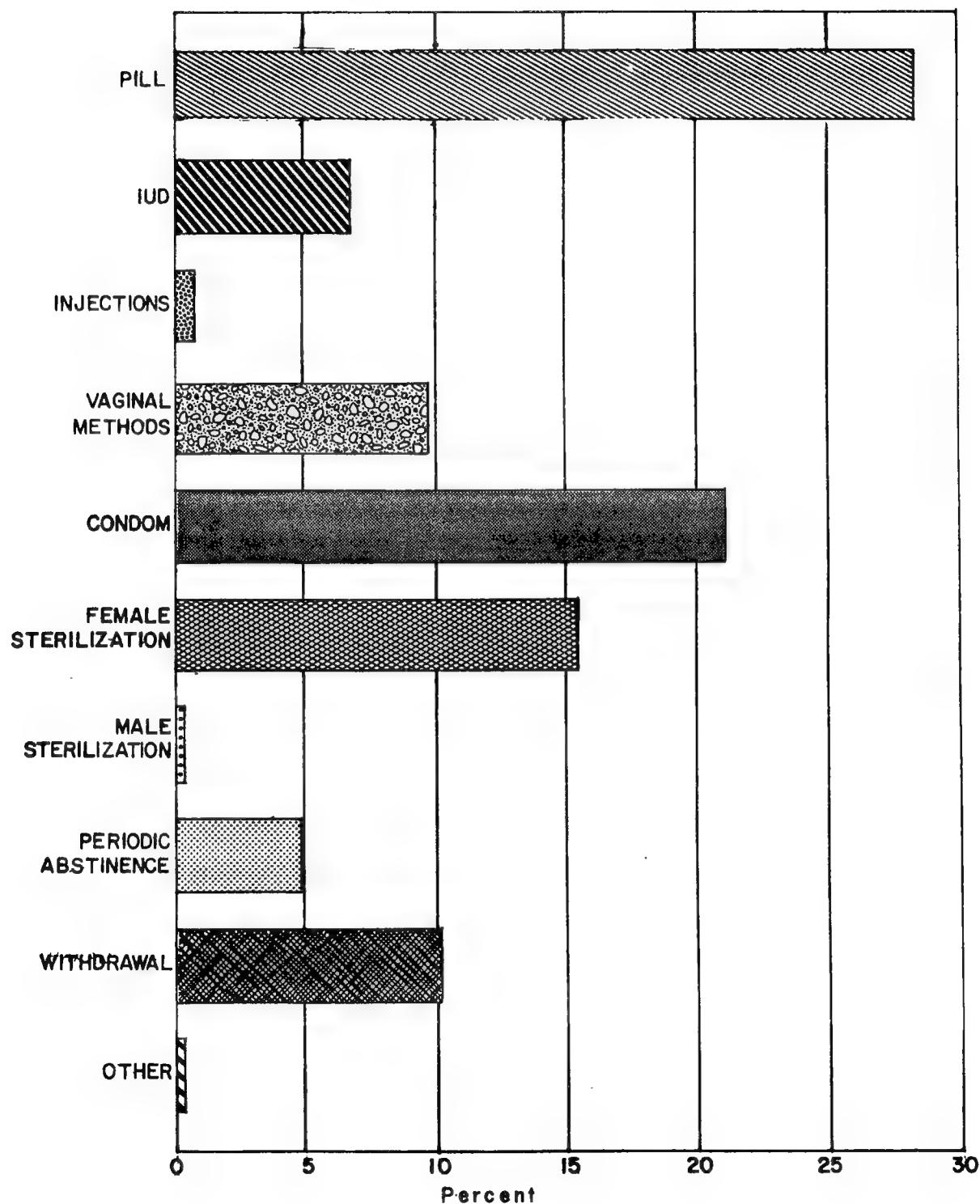
The use of a permanent method (sterilization) by the various subgroups has been discussed earlier and will not be repeated in detail here. The substantial effect of age on the use of sterilization by the groups should be remembered. However, it might be useful to consider other factors which affect the use of sterilization--for example, the age of the women when they were sterilized, as well as the number of methods they had used before selecting sterilization. These are shown in Table 2.6, which also shows the percentage of sterilized women who regret having had the operation. Because of the limited numbers involved, the breakdown by characteristics of the women is limited.

The mean age at sterilization for all 228 women is 37.1 years. It is hardly surprising that the mean is positively associated with current age. Much more interesting is the fact that women with some secondary education had a mean of 39.9 years, nearly 22 percent higher than the mean for women with only primary education or none. The ethnic differential is even larger, the mean for Indians being 27 percent higher than the mean age at sterilization among non-Indians.

These substantial differences, according to level of education and ethnic origin, are also reflected in the number of methods women had used before being sterilized, for the better educated group and non-Indians had much higher means than the less-educated and the Indians, respectively, the education differential being nearly three and one-half times as high as the difference between the two ethnic groups.

As many as 19 percent of sterilized women currently under 30 years of age, admittedly very few (4 out of 21), reported that they regretted being sterilized, as compared with the overall average of 7.5 percent, while less than 5 percent of the oldest group had any such regrets. There was no difference between the two education groups with respect to the proportions regretting their sterilization, but ethnicity was an important factor in the women's post-sterilization attitudes, with as many as 11 percent of the non-Indians having regrets compared with less than 3 percent of the Indians. The high level of use of temporary methods (84 percent) has implications for programme and health personnel in estimating and anticipating the demand for specific supplies.

FIGURE 3. PERCENTAGE OF USERS WHO ARE USING EACH CONTRACEPTIVE METHOD



### Use of Modern and Traditional Methods

Nearly 16 percent of all current users were using less effective, traditional methods, including periodic abstinence, withdrawal, and other (mainly folk) methods. The use of these methods is appallingly high (30 percent) among women aged 15-19 and suggests that the quality of "knowledge" of contraceptive methods generally (93.7 percent) and of modern methods (93.3 percent) among this age group should be suspect. This is a clear indication to programme directors and other health personnel that there is a great need for family planning education among the young people of this country. The percentage of users selecting these traditional methods varies between 11 and 19 percent of the other subgroups. It is least for the high fertility 25-29 age group and also fairly low for common-law women. The women with secondary education and women in visiting unions, both groups with high proportions of younger women, also have high levels of use of traditional methods. Variations between urban and rural women, and between Indians and non-Indians are negligible, while Christian women have a slightly greater proportion of users of these methods than non-Christians. In general, however, apart from the impact of age on the use of both traditional and permanent methods, the characteristics of the women do not appear to affect unduly the selection of these types of methods.

### Use of Supply Methods and Clinic Methods

The use of supply methods in preference to clinic methods does show somewhat more variation, according to the characteristics of the women. This increases with age, from 64 percent of the 15-19 group, to a maximum of 74 percent among women aged 25-29 and declines steadily thereafter to a minimum of 26 percent for the oldest group. Only for women in the 40-44 and 45-49 age groups does the use of clinic methods exceed that of supply methods and, indeed, these are the only two subgroups, in which the precedence of clinic methods is maintained.

There is little difference according to residence in the proportion of women using supply methods, but the more educated women and Indians tend to use these methods to a greater extent than the less-educated and non-Indians, respectively. Their use is also greater for visiting and common-law women than among married women and also greater for non-Christians and Roman Catholics than for the other Christian group.

### **Probable Future Use of Specific Methods by Current Nonusers**

Of the 2,384 nonusers of contraceptive methods interviewed in the TTDHS, 838 (35 percent) indicated that they intended to practice contraception in the future. Of the 1,238 women in union and not practicing contraception, 42 percent intended future use. Highest percentages of probable users were found among women under 30 years of age, those with secondary education, non-Indians, those not presently in a cohabiting union, Roman Catholics, and the low parity groups. The urban/rural differential was small (Table 2.7).

Of the 838 women, who intend to use contraception in the future, nearly one-in-four were not sure what method they would select, and nearly one-half of the rest preferred the pill. No other method attracted as many as 10 percent of the intended users. Indeed, only among women 35 years and over (80 women) was there a proportion who preferred another method (sterilization) to the pill, and the difference between proportions of these older groups choosing each of these two methods was negligible.

In all, 70 percent of the prospective users said they would select one or another of the modern methods, and only 6 percent (mainly older women) preferred traditional methods. Preference for the pill is overwhelming in all age groups except the 35+ group, already mentioned, and in all other subgroups. The condom, attracting only 9 percent of the prospective users, was selected by more than 9 percent of young women 15-19 and the 30-34 and 35+ age groups, women with secondary education, Indians, married women and those not at present in a union, rural women, other Christians, and other non-Christians.

Apart from the expected predilection of older women for female sterilization, as many as 13 percent of the less educated women and 16 percent of each of the married and common-law groups, all three of which groups have a higher than average proportion of older women, expected to use this method.

It augurs well for the future that the majority of women who said that they intend to practice contraception have opted for the more effective methods, particularly the pill. That the overall proportion of never-users who intend future use is so low is, however, cause for some concern, even though many of the women who do not plan to use contraceptive methods are mainly older, less fecund women. It is posited that many of the younger, more educated women with low parity, who were recorded in the survey as having no intention of using contraceptive methods, may be persuaded to adopt a different position as they grow older, enter into unions, and begin or increase childbearing. Nevertheless, there are important implications for family planning programme and health services personnel, if contraceptive use is to increase from the ten-year stagnation level.

### III. METHOD SHIFTING AND DISCONTINUATION

This section is divided into two main subsections, relating to two distinct, but not mutually exclusive, groups of women. In the first, we consider the extent and direction of method shifting among all users of contraceptive methods in the last closed and open intervals. These intervals have been used for the analysis in order to avoid duplication with respect to women who may have changed methods, not only within earlier closed intervals but also between intervals. An even more compelling reason is the fact that no more than two methods--the last method and the one used before the last--were recorded for current users. Multiple shifts are, therefore, excluded as is possible method shifting in the open interval by women not currently practicing contraception at the time of the DHS survey. In this subsection, we explore the possibility that certain socio-demographic groups may be more prone to method shifting than others, as well as the variation in the level of shifting, according to specific contraceptive methods.

The second subsection examines how method discontinuation varies, according to specific methods and to the characteristics of the women, length of use before discontinuation, and the reasons given for ceasing use of these methods. Discontinuations include shifts to another method as well as the cessation of contraceptive practice altogether. The number of users of a particular method include those who used just that one method, shifters who switched from that method, and contraceptive drop-outs, for whom it was the last method used. All women who became pregnant after using or during the use of a method are deemed to have discontinued the use of that method.

Among the reasons articulated for discontinuation was "method failure." However, as the final DHS report points out,

...the information collected in the TTDHS does not permit an assessment of whether method failure resulted in pregnancy or was merely a concern of the respondent. Also, it is not known whether method failures resulted from the improper or inconsistent use of methods, or from failures of the methods despite correct usage.

As method failure could be an important element in the level of fertility, some limited attention is given to this reported reason for discontinuation, by examining responses to the question "Did you become pregnant while you were still using (LAST METHOD)?" Some leeway for inaccuracy in the responses still exists, for women may respond positively rather than admit inefficient method use. Moreover, the exact time of conception is not usually known, so some caution must be exercised in the interpretation of these data.

Some caution is also called for in using data relating to length of use. As reported to the author in a letter from the IRD country monitor:

Computer-driven editing revealed many inconsistencies--for example, a woman said she used a method for 3 years and two months, but her births were only 3 years and 5 months apart, not leaving sufficient time for pregnancy. When such errors were detected in the field, the duration data were corrected. However, the only such errors that could have been detected were cases where the duration was too long for the interval; thus, all corrections would have been in the direction of shortening the duration of use. Since there could be no way to note that a reported

duration was too short, and since respondents were probably as likely to under-report as to over-report durations, data editing may have introduced a downward bias.

This should be borne in mind. In addition, there is no way of detecting any similar deficiencies in data relating to the open interval, but some recall lapse is probable, especially where the interval has been of lengthy duration.

Preceding the two main subsections described above is a brief discussion of the propensity towards method change among the women in the survey.

### Method Shifting in the Last Closed and Open Intervals

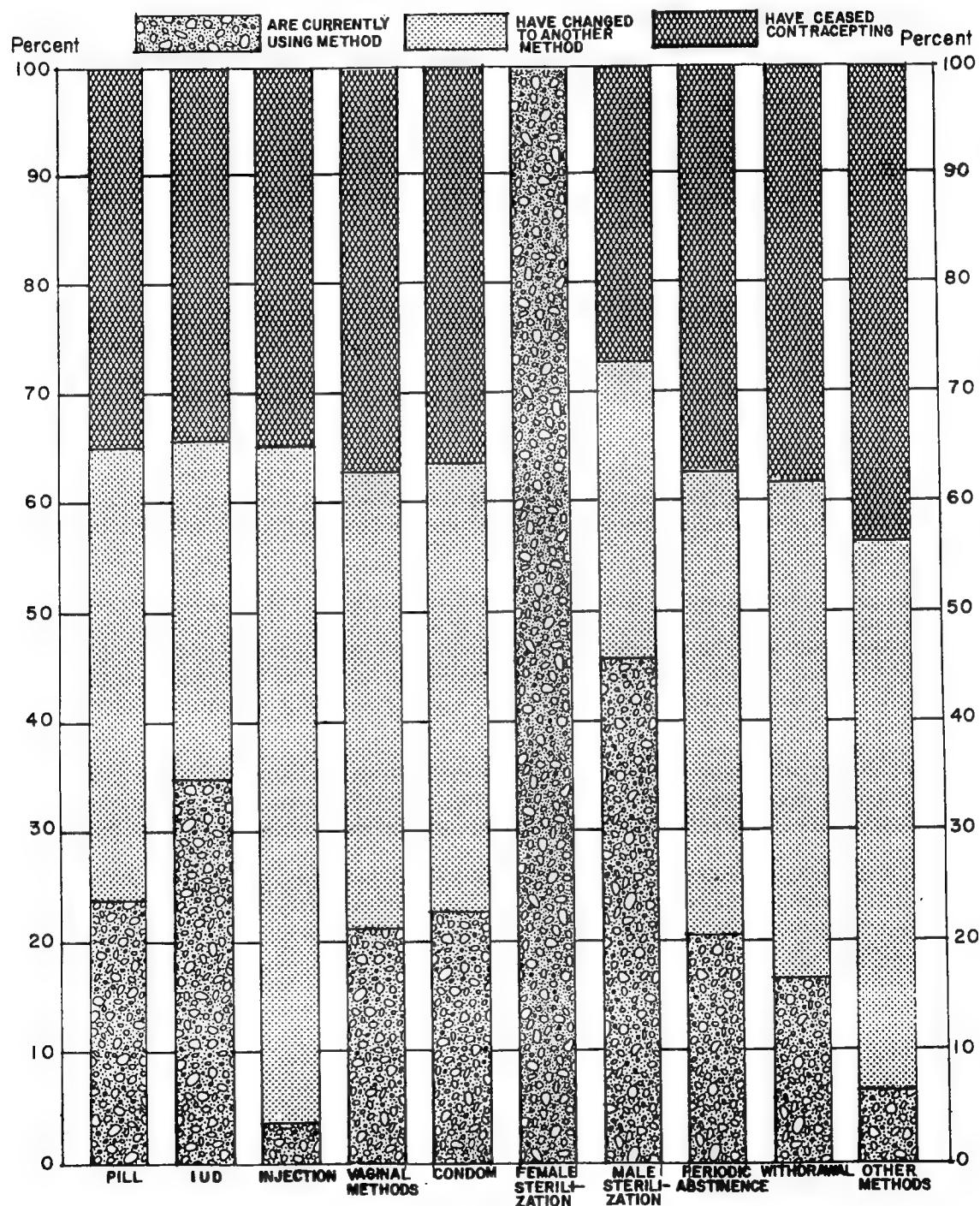
In the reference period, there were 615 method changes among women in the survey. This number represents 21 percent of the methods used and were made by 17 percent of the contraceptors. Table 3.1 sets out, for each method, the percentages of method users who discontinued the use of that method and shows a breakdown, according to whether the discontinuations resulted in a shift to another method or in contraceptive termination (see also Figure 4). A comparison table, Table 3.2 displays similar information but compares variation between the different socioeconomic groups. For the present, we will confine our attention to method shifting.

Apart from the other (mainly folk) methods, used by only 31 women, the little used injectables sustained the highest level of shifting, confirming the unpopularity of this method, already mentioned. This proportion is more than twice as high as found among all methods taken together. The proportion of shifters away from other methods ranged between 23 and 32 percent, being least for the pill and highest for the IUD, which suggests that (apart from injections and "other" methods) method shifting is not unduly affected by any intrinsic qualities of the methods themselves. Before considering whether the high level of method shifting is associated with the characteristics of the women, it is well to examine in some detail the level and direction of shifts between the individual methods.

More than one-third of the shifts from any method other than the pill in the last closed and open intervals changed to the contraceptive pill (Table 3.3). However, these gains were not enough to offset the large number of women, who ceased using the pill in favor of another contraceptive method, so that the pill sustained an overall loss in number of users. More than one-fourth of women who shifted from the pill moved to the condom, and 14 percent adopted sterilization as their method of choice. The IUD and vaginal methods also gained relatively large percentages of ex-pill users. But it is important to note that as many as 22 percent (42 women) of those who ceased using the pill resorted to traditional, less effective methods, indicating a decline in the quality of contraceptive protection enjoyed by these women.

Women who shifted from the use of the IUD tended to shift to the pill and, to a lesser extent, to vaginal methods and sterilization. As stated earlier, the contraceptive injection has not proven popular in Trinidad and Tobago, and a large proportion of its users soon shift to another method, one-third to the pill, 28 percent to the condom, and 15 percent to periodic abstinence or withdrawal. The condom was also the second choice of large proportions of women, who shifted from vaginal methods, and the traditional methods of periodic abstinence or withdrawal. But the overall net loss in numbers of condom users was large. This may appear somewhat surprising in view of the high prevalence of Acquired Immune Deficiency Syndrome (AIDS) in this country, which is purported to be experiencing the second highest per capita incidence of the disease in the Western Hemisphere. However, it was not until late 1987 that AIDS gained a great deal of publicity in this country and a real increase in condom users since then is not reflected in the data from the survey. Large numbers of condom users shifted to the use of the contraceptive pill and to other modern methods. However, once again, as in the case of the pill, a fairly large proportion of shifters moved from the condom to traditional methods-as many as 15 percent of the ex-condom users having begun to practice withdrawal. Overall, the condom experienced the largest net loss in numbers of users, while the largest net gain was to female sterilization. The majority of women who shifted from periodic abstinence, withdrawal, and other (mainly folk) methods moved to the pill or vaginal methods. Indeed, 9 percent of all method shifters moved from a temporary to a permanent method.

FIGURE 4. METHOD SHIFTING AND DISCONTINUATION BY EVER-USERS OF EACH METHOD



In summary, a large majority (67 percent) of method shifters moved from one modern method to another, and 15 percent exchanged traditional for modern methods. However, one-in-six of the women who changed contraceptive methods reduced their level of contraceptive protection by shifting from modern, effective methods to traditional, less effective methods, a circumstance which has serious implications for programme planners and educators.

However, examination of the absolute numbers and percentage breakdowns do not tell the whole story. As shown in Table 3.4, the probability of shifting from any specific method to any other method is highest for users of the residual "other" group, which was used by very few women in the reference period. Very high is the chance of shifting from the use of injections when compared with the probabilities of shifting from each of the other methods. Indeed, the likelihood of changing from injections to another method is more than twice as great as for any of the other methods, except the condom and withdrawal. For these two methods, the excess is 81 and 95 percent, respectively. Users were least likely to terminate the use of the pill in favor of another method, while the probability of shifting from the rhythm method (periodic abstinence) was not much higher.

The contraceptive pill is also the method most likely to be selected by shifters from other methods, followed by the condom. The probability of any other method becoming the next choice of method shifters was, in each case, very much lower.

We have noted with concern the comparatively large number of method shifters who have changed to one of the three traditional methods shown in Table 3.3. However, the probability of method users shifting to periodic abstinence or the residual "other methods" is well below average, ranking 7th and 9th respectively on the list of ten methods. The odds on shifting to withdrawal are, however, relatively high, exceeding the probability of shifts to the IUD, injections, male and female sterilization, as well as the other two traditional methods.

Among women shifting from the pill, the method with the highest probability of being selected by method shifters is the condom, followed by (in descending order of preference): vaginal methods, IUD, female sterilization, and withdrawal. Most likely accessions are from users of the "other" traditional methods, injections, and the condom.

In general, the IUD has a comparatively low probability of being selected by users of other contraceptive methods but about average chance of being discontinued for another method. Most likely to use this method are women changing from the pill or injections, while it is least likely to be chosen by women, who discontinue the use of vaginal methods or withdrawal. Women shifting from the use of the IUD are at least twice as likely to select the pill as to change to any other method. Fairly high probabilities of being selected among these women are vaginal methods, withdrawal, and female sterilization.

The probabilities of shifting to and from the use of injections confirms earlier comments on the unacceptability of this method among the women of Trinidad and Tobago. Apart from the little-used "other" group, the injection has the highest probability of being exchanged for another method as well as the least chance of being selected by shifters from another method. As with users of most other methods, the pill and the condom have the greatest likelihood of being selected by ex-users of injections, followed by female sterilization. Withdrawal has a greater probability of selection than any of the other methods not mentioned above. As noted earlier, very few women shifted to injections, most probably ex-users of "other" methods and to a much lesser extent, of the condom.

The likelihood of shifting to vaginal methods ranks third in the probabilities shown in Table 3.4 but is well below the chance of accessions by the pill and the condom. Most likely to be shifting to vaginal methods are women who have been using the ineffective "other" methods, while the pill and condom are the methods with the greatest chances of being selected by women shifting from the use of vaginal methods.

The condom has been named as the second most widely used method--both among ever-users and current users. Yet the probability of shifting from this method is somewhat higher than that of changing from any other method except injections and the residual "other" group. The likelihood of shifting to the condom from another method is also comparatively high, ranking second behind the pill, but it is less than one-fourth the probability

of a shift in the other direction. Women most likely to adopt the use of the condom after changing from another method are those who terminate the use of injections, vaginal methods, periodic abstinence, and withdrawal. Condom users have a one-in-ten chance of switching to the pill, about three times the odds of switching to withdrawal. The probability of switching from the condom to any of the other methods is comparatively low.

Withdrawal, one of the four most widely used methods, does not have a high probability of being used by women changing from another method. About one-in-fifty of all method users switch to this method after using another method. About one-in-twenty of the women shifting from injections select this method; and about one-in-thirty of those terminating the use of the condom and the residual "other" methods do the same. The likelihood of shifting from the use of withdrawal to the use of another method is only slightly less than that of shifting from the condom; and the greatest likelihood is for these shifters to choose either the pill or the condom.

In summary, there is a greater than one-in-ten chance of (a) users of injections shifting to the pill and condom; (b) users of the condom shifting to the pill; and (c) users of "other" methods shifting to the pill (a probability of .2069) and vaginal methods. Periodic abstinence does not rank high in the probability of switching either to or from this method.

Table 3.2 shows that the incidence of method shifting varies somewhat between socio-demographic groups of women. The level of method change is 4 percentage points higher among the youngest group, aged 15-19, than the overall average. It declines with an increase in age to 23-24 percent in the 25-29 and 30-34 group and then increases once more, but is proportionately very low for the oldest group. The increase in method shifting for the 30-34 and 35-39 groups reflects, to some extent, changes to permanent methods--nearly two-thirds of all sterilized women, have the operation between the ages of 30 and 39, as noted in Table 4.9 of the DHS report. The low level of method shifting among the oldest group undoubtedly indicates the expected decline in fecundity when a large proportion of these women will have ceased contracepting altogether.

Method shifting is higher among women with secondary or higher education, urban women, and Indians than among their lesser educated, rural, and non-Indian counterparts. Married women and common-law wives have an equal and comparatively low level of method shifting; but nearly 49 percent of visiting women changed methods in the reference period. The high percentage of shifters among women in this type of union is a direct result of the relatively high level of method shifting among young women under 24 years of age, who constitute the majority of this group.

### Contraceptive Drop-outs

In the last closed and open intervals, 934 of the 1,550 discontinuations resulted in the cessation of contraception altogether rather than shifting to another method. Except in the case of the pill and periodic abstinence, method shifters exceeded the number of women who ceased contraception altogether. Total discontinuations represented a high proportion of users of all methods--52 percent of all methods and 57 percent of all methods excluding sterilization. The proportions varied between 48-49 percent of users of the pill and condom and 88 percent of users of injectables. Apart from injections, discontinuations were generally somewhat higher among users of the less effective methods than among the rest.

From Table 3.2 we can assess the extent of contraceptive drop-out in the last closed and open intervals among the subgroups of women. Variations in the incidence of contraceptive drop-outs follow the expected pattern. It is higher than average among women 20-29 years of age, suggesting the desire for pregnancy as a strong motivating factor, since these are the two high-fertility age groups. It declines for the 30-34 and 35-39 age groups, these being the groups with a high level of shift to permanent methods. The subsequent increase in the two older groups reflects increasing subfecundity in these groups.

Education and residence differentials in contraceptive drop-out are minimal, but there is a large difference between the proportions of the two ethnic groups, who terminated contraception in the last closed and open intervals. Among non-Indian users, the drop-out rate was nearly half again as high as the corresponding rate for Indians. As posited earlier, the high drop-out level among non-Indians would account for what is an important turn-around in the relative positions of the two ethnic groups since the 1977 fertility survey. In that

survey and in the earlier survey in 1970, it was the non-Indians who had the higher level of contraceptive use. The change cannot be attributed to differences in the number of children considered ideal by the two ethnic groups, for the mean ideal number of children among all women differed only minimally--3.0 for Africans and 2.9 for Indians and women of mixed descent (See Table 5.6 of the DHS report). The reasons for discontinuation of contraceptive use, as distinct from the reasons for discontinuing the use of specific methods, were not assessed in the DHS. It is important to find out why non-Indian women have such a high drop-out rate, and this is one area which demands further and early research.

Drop-out rates for the union status groups vary widely. The rate is understandably low for visiting women, the majority of whom are under 25 years of age. The very high rate among women no longer in union at the time of the interview is also not unexpected. Common-law wives have a much higher tendency to terminate contraception than married women.

As stated earlier, the method shifting and contraceptive drop-out rates discussed relate to contraceptive users in the last closed and open intervals. Theoretically, all women who gave birth to a child will have ceased contraception, if only temporarily. If we omit these women from the calculation of drop-out rates and examine the incidence of contraceptive discontinuation in the open interval only (Table 3.5), the higher level of contraceptive drop-out among non-Indians is confirmed, but the ethnic differential is proportionately lower, indicating that the difference was greater in the closed interval. The very high rate of cessation of contraception in the open interval among women in visiting unions suggests that after the birth of the last child, visiting women tended to cease contraception, a circumstance which has serious implications for the overall level of fertility in the near future. It should be remembered, however, that the length of the open interval could vary from one month to as much as 30 years, and what the table indicates is the proportion of women who at some time in that interval had used a contraceptive method but had ceased using one. It does not purport to offer continuation rates, which must take into account the length of use of that method before discontinuation and measures the probability of discontinuation over a specified period, usually one year.

#### **Length of Use of Selected Methods before Discontinuation**

Known deficiencies in the data relating to the length of use of each contraceptive method before discontinuation have already been mentioned, as has the probable downward bias resulting from corrections made during the computer editing of the data. We confine our attention to the five most widely used methods, together accounting for over 75 percent of all users, and examine the length of use of these methods before discontinuation (or pregnancy) as shown in Table 3.6.

The IUD, with the lowest level of discontinuation, as noted earlier, had the highest proportion of discontinuations which took place after more than one year's use, implying a high degree of confidence in this method on the part of its comparatively few users. The pill had a similarly high proportion of its users who persevered with the method for more than a year, but it should be remembered that nearly 62 percent of the women who used this method in the reference period had discontinued its use. One-fourth of condom users continued its use for less than three months, but such short-term use was even more prevalent among users of withdrawal and vaginal methods--more than one-third of the users of the latter method discontinued in under three months from acceptance and less than one-third persisted for more than a year. It may be recalled that users of vaginal methods did not sustain a particularly high level of method shifting but, along with the pill and periodic abstinence, lost a fair proportion of users to contraceptive drop-out. That withdrawal experienced a comparatively high level of short-term use and a correspondingly low level of use for more than a year is not surprising in view of the well-known inefficiency of this method.

It is possible using life table methodology, to calculate continuation rates for each method, and their complement--discontinuation rates--by combining the level of discontinuation and the length of use before such discontinuation. The continuation rate expresses the probability that a method user will continue the use of that method for a specified period, usually one year. However, this has not been calculated in view of the high percentages of "not stated" for length of use of each method, as well as the effect of the admitted downward bias in the data.

## Reasons for Discontinuation

The DHS questionnaire listed nine possible reasons for discontinuation of a contraceptive method with additional "other" and "don't know" categories. These were: to become pregnant; method failed; partner disapproval; health concerns; access/availability; cost; inconvenient to use; infrequent sex; and fatalistic. Change to a permanent method was an option only for method discontinuation in the open interval, while women who had given birth in the five years preceding the survey were asked a specific question relating to each closed interval: "Did you become pregnant while using a method?" Women who responded "yes" to this question would already have given some other main reason for discontinuation, and their options did not include "method failure." So few women gave fatalistic responses that these have been included in the "other" category.

There are some reservations about the precision of classification of some of these reasons. It is our contention that many women who claimed that they ceased using a method to become pregnant may have been rationalizing after the event, not wanting to admit inefficient use of the method. Further, it has already been indicated that it is not certain whether "method failure" actually resulted in pregnancy or was merely a concern of the respondent, a point made in the DHS Report. Similarly, "health concerns" could include not only side effects of a method or fear of side effects, but this category could be a catch-all for other indefinable reasons. These reservations notwithstanding, we can examine the reasons given by the respondents to assess the extent to which they vary with the specific methods. Data relating to the last closed and open intervals are shown separately in Table 3.7.

In the last closed interval, more than 40 percent of all contraceptive users indicated a desire to become pregnant as the main reason for discontinuation. This proportion exceeded 40 percent for users of three of the four most widely used methods and was somewhat lower for users of vaginal methods. Among the lesser used methods, the desire for pregnancy was given as the main reason for discontinuation by as many as 60 percent of users of periodic abstinence, but the comparable proportions for users of the IUD and injections were very low. Health concerns, named as the main reason for discontinuation by 19 percent of all users, was of particular concern to users of the IUD and injections (46 percent) and the pill. Users of other methods did not consider this as important. None of the other reasons for discontinuation identified on the questionnaire was given by more than 10 percent of users of any other method, while the don't know/not stated component was generally quite high, except in the case of users of the pill and the condom.

That as many as 42 percent of users of withdrawal claimed method failure as a reason for discontinuing the use of this method is not surprising, since inefficiency in the use of withdrawal is well recognized. Method failure was also quoted by a high proportion of users of the safe period. (See Figure 5). Again, this is not unexpected in view of a low level of knowledge of the reproductive cycle, as indicated in the DHS Report:

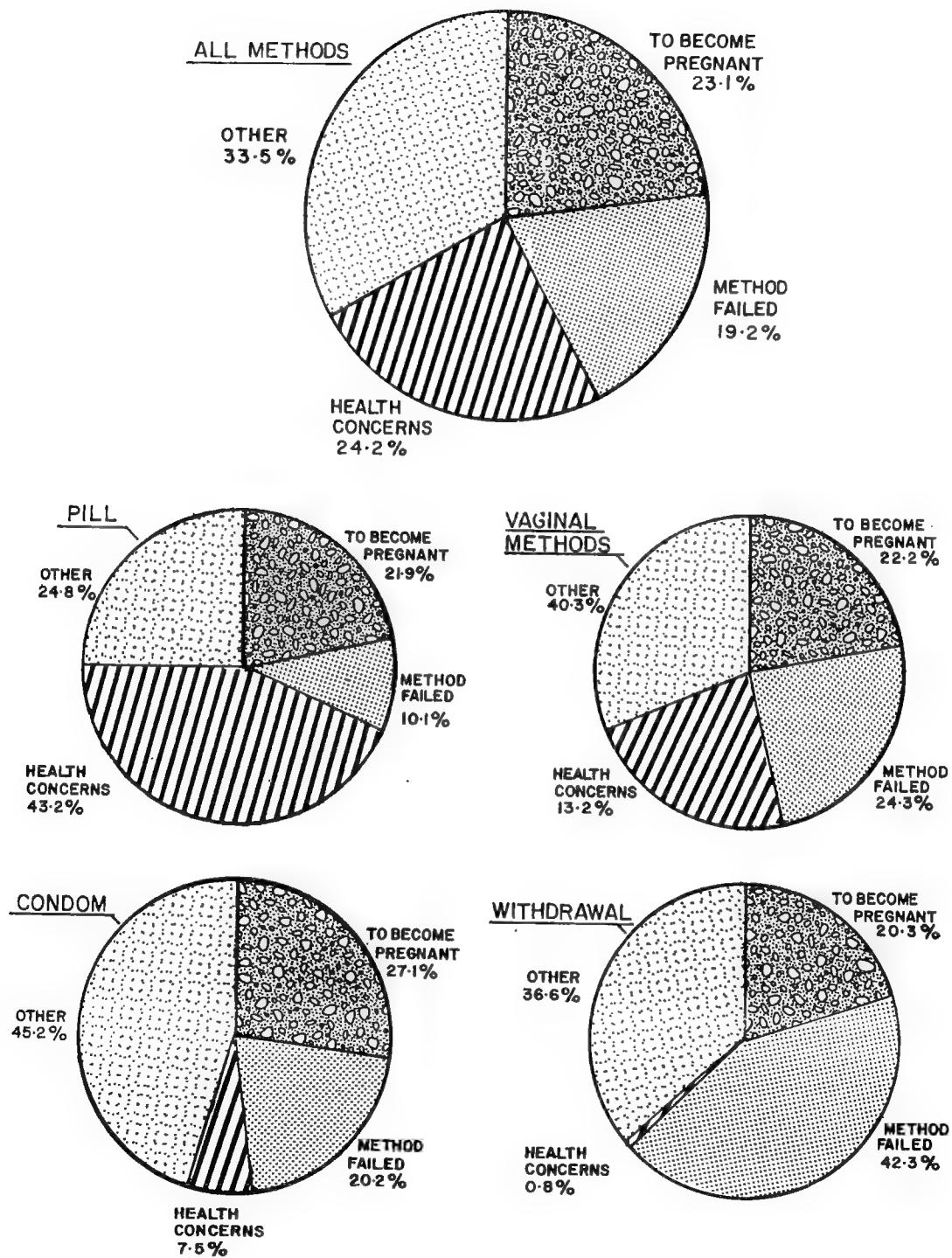
Respondents were asked when during the monthly cycle they thought a woman was the most likely to become pregnant. As Table 4.10 shows, 50 percent had no idea, and only 18 percent correctly responded that the middle of the cycle is the fertility period.<sup>6</sup>

As stated, women who had discontinued the use of specific contraceptive methods in the open interval had two additional options in naming the main cause of discontinuation: method failure and a change to a permanent method. The former reason was named by just 5 percent of discontinuers, suggesting that they experienced either induced or spontaneous abortions. The proportion who reported a change to a permanent method appears low--only 4.3 percent, or 39 women--especially as 55 women were recorded as having switched from other methods (see Table 3.4), while a total of 228 women were using female sterilization at the time of the interview. The fact that sterilized women had used a mean of 2.08 methods before sterilization introduces a measure of doubt as to the accuracy of the responses in articulating their reasons for discontinuation.

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<sup>6</sup> See the DHS Report, p. 36.

FIGURE 5. REASONS FOR DISCONTINUATION  
OF SELECTED METHODS



The most important reason given for discontinuation in the open interval was "health concerns" named by 37 percent of all discontinuers, the proportion varying between 60 and 75 percent of users of the pill, IUD, and injections (the same methods for which this was important in the last closed interval), and much lower for the less used methods.

Infrequent sex, the reason next in importance, was named by 14 percent of discontinuers. However, the variation according to method appears illogical, since it is among users of periodic abstinence, withdrawal, and the condom that proportions giving this as their main reason for discontinuation were quite high. Yet these are the methods, which could be expected to be used when frequency of intercourse is low.

#### IV. SUMMARY OF SUBSTANTIVE RESULTS AND IMPLICATIONS

Differing coverage and age classifications used in the 1970 KAP survey, the 1977 Trinidad and Tobago Fertility Survey and the 1987 Demographic and Health Survey limit comparisons and assessment of change. It is, however, quite clear that there were appreciable increases in the levels of both ever-use and current use between 1970 and 1977, and no increase in use in the following decade. There has been a decline in contraceptive use among women 25-34 in the 1977-1987 period, while use increased among younger and older women.

There has been some change in the past ten years in the method mix, in that use of the contraceptive pill has declined in all age groups over 25, although it remains the most popular method overall. There has been a considerable increase in the use of female sterilization as the contraceptive method of choice. Use of the contraceptive injection has all but disappeared in these age groups. There have been increases in the use of traditional methods (safe period, withdrawal, and other folk methods) except for a slight decline in the use of periodic abstinence in the 25-34 group and also in the use of withdrawal by women aged 45-49 years.

The decline in use in the most productive age groups has coincided with increases in the crude birth rates and has numerous implications for programme managers. The 15-19 year olds include a sizeable proportion who were using less effective methods, mainly withdrawal, but also an unexpectedly large number of older women have shifted from modern to traditional methods in the past ten years. There is much work to be done by programme planners if there is to be any impetus for growth in contraceptive use in the years ahead.

#### Characteristics of the Women in Relation to Choice, Change, and Discontinuation

The hypothesis formulated in the introduction is that the personal characteristics of the women are associated with their choice of contraceptive method, their propensity to change from one method to the next and to discontinue the use of specific methods or the practice of contraception altogether. We will consider each of the major characteristics (age, education, residence, ethnicity, union status, and religion) in turn and assess its impact on selection, change and discontinuation.

##### Age

The well known pattern, in which contraceptive use is comparatively low for the youngest and oldest groups and more or less constant among women 30-44 years old, holds true for Trinidad and Tobago with respect to the levels of both ever-use and current use of contraceptive methods. This factor had an overwhelming impact on the selection of specific methods and also on the differentials noted, according to the other demographic characteristics of the women.

The method mix of current use is clearly different for younger women than for their elders. Indeed, there appear to be three distinct phases in the reproductive cycle, 15-24, 25-34, and 35 and above, each of which is associated with the selection of a particular method or group of methods. Women in the 15-24 age group had a high proportion who were practicing withdrawal at the time of the survey, a level of use which exceeds even that of the pill, which is the most popular method among all other age groups under 35. The use of the condom is less widespread than for the other groups, while the practice of periodic abstinence and female sterilization is very low for these young women.

In the middle age groups, the condom ranks second only to the contraceptive pill both in ever-use and current use. Female sterilization and periodic abstinence, the use of which is positively associated with age, are in use by a fair percentage of women in these age groups. Among women 35 years of age and over, female sterilization is the most widely used method followed by the condom, this latter method having a lower level of use among these women than in the 25-34 age group.

Age is not associated with the use of methods other than those mentioned above. However, since current users of the pill, condom, withdrawal, and female sterilization together comprise 75 percent of all users, the conclusion must be that the age of the woman constitutes an important element in method choice. However, the impact of age on method selection varies considerably in its intensity. It is strong in its effect on the level of use of female sterilization by women with a secondary education and visiting women, as well as in the use of withdrawal by all four religious groups. Less marked but fairly substantial is its impact on the use of the pill by both educated groups, visiting women and Hindus; the use of the condom by visiting women; and the use of sterilization by the lower education group, married and common-law women, and other non-Christians. Age contributed little or nothing to the level of use of the condom, except in the case of visiting women.

Bearing in mind the high level of contraceptive knowledge among young women reported in the DHS Report, the considerable use of traditional methods in general, and of withdrawal, in particular, among women under 25 years of age is somewhat surprising.<sup>7</sup> There is easy access to efficient contraceptive supplies and services, and these are free of cost. Therefore, this anomaly is difficult to explain. It does, however, point to one specific group to whom special attention needs to be given if there is to be any enhancement in the quality of contraceptive protection enjoyed by the women of this country.

The decline between 1977 and 1987 in the percentage of women aged 25-34, who were currently contracepting also has serious implications for the level of fertility, for these are the most fertile of all age groups. If contraceptive use continues to decline for women in this age group, there undoubtedly would be an impact on the overall level of fertility.

Method shifting is highest for the 15-19 group and declines to a minimum for the 25-29 age group. After 40-44, method shifting is relatively low, a high proportion of the older women cease contraception altogether, due to the natural decline in fecundity among older women. By the same token, contraceptive drop-out is low among the youngest women but increases to a maximum for the 25-29 group, a high fertility group. A high level of method shifting among women aged 35-39 and 40-44 is doubtless due to the fact that these are the ages at which most women who are sterilized will have the operation.

#### Level of Education

Women with secondary or higher education have a higher level of ever-use and of current use of contraceptive methods than do those whose schooling was limited to the primary level. While there are small differences by education in the ever-use of specific contraceptive methods (e.g., the greater preference for female sterilization among less educated women), most of these differences are attributable to the age distributions of the two education groups.

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<sup>7</sup> See the DHS Report, Table 4.1, p. 26.

Current use of specific methods follows much the same pattern of ever-use with the more educated showing a preference for the pill, IUD, and vaginal methods; and the lesser-educated having higher proportions using female sterilization. However, these differences, which were initially slight, are reduced almost to zero when age standardization is carried out. In general, therefore, the impact of education on method selection appears minimal. There is also no real difference according to education in the incidence of contraceptive drop-out, but method shifting is higher among the more educated and younger group.

#### Residence

The difficulty in identifying urban as distinct from rural areas in Trinidad and Tobago has been mentioned, as has the fact that the areas included as urban in our analysis comprise only the municipal areas and excludes scores of small towns and other areas with urban or suburban characteristics. The present dichotomy was chosen to ensure consistency with data from the DHS Report.

The levels of both ever-use and current use of contraceptive methods are higher among urban women than among rural women. The urban/rural differences are generally small, but there is a distinct and significant preference for the use of the condom by rural women over urban women, a preference which is in no way affected by age. The pill and the rhythm method have been, and continue to be, more popular among urban women.

Urban women are more prone to method shifting than rural women, but the rate of contraceptive drop-out is equal for both residence groups. Overall method discontinuation is therefore higher for urban women. Nevertheless, as an indicator for future action/attention among formulators of policy and family planning and health educators, the type of residence of the women, especially the imprecise dichotomy used for our analysis, does not offer any valid contribution.

#### Ethnicity

The proportion of women who have ever used contraception is somewhat higher among non-Indians than among Indians. However, the relative position of the two groups is reversed when we consider current use of contraception. There had been evidence from earlier surveys that the ethnic differential in contraceptive use (and, incidentally also in mating patterns and fertility) was declining. However, the DHS is the first survey which has produced data indicating that the gap has closed entirely and, by extension, that contraceptive drop-out is much more prevalent among non-Indians than among Indians. Non-Indians are also more prone to method-shifting than are the Indian women. With respect to method selection, Indians show a much greater preference for the condom than for all other methods. This predilection is not in any way affected by age distribution.

#### Union Status

The ever-use of contraceptive methods is highest among married women, with common-law, visiting, and single (i.e., no longer in union) women, following in that order. Married women continue to head the ranking of union status groups in current contraceptive use, but level of current use is just as high among visiting as among common-law unions.

Although differences between the method mix of the four union status groups are small, the married group has the highest proportion using the condom and the lowest proportion using the pill. Female sterilization is very infrequently used by visiting women, since a large proportion of this union type group are young women under the age of 25 years. The pill is the most popular method among these visiting women. Vaginal methods were in current use mostly by common-law wives, who also had a fair proportion of their numbers using the pill.

Method shifting is much more prevalent among visiting women than among the other two current union types, almost certainly because of age distribution. But contraceptive drop-out is least among this group. As would be expected, method shifting is low and contraceptive drop-out is high, for women who were no longer in a union at the time of the survey. Between married and common-law women there is no difference in the level of method shifting, but common-law wives are 47 percent more likely to cease contracepting than are married women.

In summary, union type is not significantly associated with the method mix used by women in Trinidad and Tobago. The incidence of method shifting and contraceptive drop-out does vary with union type, but this is associated with other predominant factors--age, level of education, and contraceptive need--and union status, *per se*, has less of an impact on shifting and discontinuation than the raw data suggest.

### Religion

Ever-use of contraceptives is most prevalent among Roman Catholic women, despite the fact that according to official Church teaching only natural methods are allowed. This group also has the highest proportion who started practicing contraception while still childless. The level of ever-use is lowest for Hindu women, and the mean number of children had at the inception of contraceptive practice was 1.804, or nearly 50 percent higher than the mean for Roman Catholics. Other non-Christians had a level of ever-use, which was much higher than that of Hindus.

Higher drop-out rates among the two Christian groups have resulted in a level of current use, which is more or less the same among three of the four religious groups, exceeding that of Christians other than Roman Catholics.

Natural birth control was used most by Roman Catholics but even so the proportion using this method was very low (7.5 percent). The pill was most often used by Roman Catholics and non-Christians other than Hindus. Hindus tended to prefer the condom as their choice of contraceptive method. The incidence of female sterilization was low among Roman Catholics, but did not vary among the other religious groups.

In general, variations in method selection reflect more on the ethnic differentials, since religion and ethnicity are so closely correlated. Religion was not used as a control variable in the analysis of method shifting and discontinuation.

### **Method-Specific Use and Discontinuation**

Four methods have been, and continue to be, more popular than the rest, together accounting for 75 percent of all current users. They are the contraceptive pill, the condom, female sterilization, and withdrawal.

#### Contraceptive Pill

Though the contraceptive pill has retained supremacy of use, this method has lost some of its popularity since the 1977 fertility survey, and the loss is common to all age groups of women, for whom valid comparisons can be made. Currently, use of the pill is relatively high among women under 30 years of age but declines among older ages, due to the combination of decreasing fecundity and switching to a permanent method.

In the last closed and open interval, 42 percent of contraceptive pill users discontinued its use, and these were evenly divided between method shifters and contraceptive drop-outs. Of the 187 women changing from the pill to another method, 144 (77 percent) shifted to other efficient methods (IUD, injections, vaginal methods, condom, and female sterilization). However, the fact that 22 percent of them should choose less effective, traditional methods indicates that the quality of contraceptive protection for this group has declined and is cause for some concern. Many users of other methods switched to the pill, but the number was not large enough to offset the shifts from the pill; thus, the pill sustained a net loss of users.

Sixty-four percent of women who discontinued the use of the pill in the open interval claimed "health reasons" as the reason for discontinuation, and 11 percent reported infrequent sex as the main reason. Sixty-three percent of those who discontinued its use in the last closed and open intervals had used the method for a year or more before discontinuation.

### Condom

The condom has retained second place in the ranking of methods ever used and currently being used. This is the method of choice for large percentages of current users between the ages of 20 and 34, and rural women, Indians, and married women show a much stronger preference for this method than their urban and non-Indian counterparts and those in other type-of-union groups.

The percentage of condom users who discontinued its use in the last closed and open intervals, was not much higher than the comparable proportion for the pill, but they showed a greater tendency towards method shifting than towards contraceptive drop-out. A large proportion of condom users who changed methods (43 percent) shifted to the pill. Other favored methods were the IUD, vaginal methods, and female sterilization. But 20 percent of the method shifters opted for traditional methods. In the period under review, there was a net loss in the number of condom users despite fairly large accretions from pill, vaginal methods, and users of withdrawal. The net loss of condom users is at first somewhat surprising in view of the prevalence of the Acquired Immune Deficiency Syndrome, which is fairly prevalent in this country. But there has been an increase in the use of the condom, subsequent to the survey and as a consequence of a great increase in awareness of AIDS and its causes.

### Withdrawal

Despite a very high level of knowledge of contraceptive methods, the continued high use of withdrawal suggests that the "quality" of knowledge is not as good as the data from the survey suggest. It is a method which appeals more to young persons in the 15-19 age group than to the rest, and is used more by rural women and non-Indians than by urban women and Indians, respectively. However, there is evidence of some shifting from more effective methods to withdrawal among older women. That these shifts tend to be among women with declining fecundity offers some consolation, but this trend needs to be monitored and countered as far as possible.

Seventy percent of the women who shifted to another method in the past five years changed to the pill or the condom. Not unexpectedly, a high proportion (20 percent) of women who discontinued the use of withdrawal in the open interval gave "method failure" as their reason for discontinuation. The implications for fertility levels in the continued high use of this less efficient method are obvious; and serious consideration as to how to discourage the use of this method should be given by programme planners.

### Female Sterilization

The use of sterilization has increased considerably in the decade preceding the DHS. It is, of course, positively associated with age which accounts, in part, for a much higher preference for this method among less educated women. This method also has high usage among common-law wives and rural women. In general, women have used an average of 2.08 methods before sterilization, and the mean age at the time of the operation is 37.1 years. Very few women regretted having had the operation.

### Other Methods

Proportions of current users using other methods vary between 0.4 percent (5 women) for male sterilization and 9.4 percent for vaginal methods, which include the diaphragm, foam, jelly, cream, and foaming tablets. No general pattern obtains in the use of these other methods, although use of the IUD is greater among common-law wives than for the other two union status groups.

One final consideration must be taken into account, that is, the extent to which the static level of contraceptive use has been due to attainment of "saturation point." In order to assess this, we consider whether women who say that they want no more children are using contraceptives to ensure the attainment of their goal.

Tables 4.15 and 4.16 of the DHS Report address this question. From the former, it is noted that there were 1,285 non-pregnant, sexually active women who were not practicing contraception. Of these, 669 (52 percent) reported that they would be unhappy if they became pregnant. The latter of the two tables sets out the

reasons why these women were not current users. Here we see that 172 women (25.7 percent) had no present partner, and 88 were either breastfeeding or were menopausal or otherwise subfecund. This leaves 409 vulnerable women who have an unmet need for contraception. They comprise nearly 16 percent of all women currently in a union, and 34 percent of those in a union and not contracepting. Therefore, "saturation point" can hardly be said to have been reached.

The analysis has sought to highlight certain aspects of contraceptive use and change, which might have contributed to the lack of an increase in contraceptive use for a decade. It will be remembered that Abdulah and Harewood (1984) found that in 1977 contraceptive use was responsible for 43 percent among Indians and 56 percent among non-Indians of the difference between the total fertility rate and the total fecundity rate (i.e., the rate of fertility if there had been no celibacy, contraceptive use, infecundability, and other factors). If, as we must assume, it is still the official policy to encourage a reduction in the crude birth rate, ways must be found to increase the use of contraceptives and to discourage the use of less effective contraceptive methods. In the light of a deteriorating economic situation throughout the country, and less financial support for the work of the FPA, more imaginative and innovative methods of dissemination are called for than are used at present, as well as deliberate discrimination in favor of young persons and other low-use groups.

For the framers of official population policy, there are implications here too, for they must consider whether higher priority should be given to the provision of funds for the FPA and the Ministry of Health to increase or vary their education and service activities, thus encouraging a renewed increase in the level of contraceptive use and enhancing the quality of contraceptive protection being enjoyed by the women.

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**APPENDIX A: Tables**



**Table 1.1** Frequency count of major subgroups of users by selected characteristics

Characteristics	Ever users	Current users <sup>1</sup>	Used in past five years	Discontinued method(s) in past five years
<b>All women</b>	<b>2,393</b>	<b>1,422</b>	<b>2,288</b>	<b>1,252</b>
<b>Age (years)</b>				
15-19	116	66	106	62
20-24	418	257	431	253
25-29	575	343	586	325
30-34	441	275	439	228
35-39	357	221	329	167
40-44	286	170	246	134
45-49	200	90	151	83
<b>Education</b>				
Primary or less	1,256	718	1,141	601
Secondary or more	1,137	701	1,147	651
<b>Residence</b>				
Urban	1,132	661	1,077	615
Rural	1,261	761	1,211	637
<b>Ethnicity</b>				
Indian	1,052	683	1,018	519
Non-Indian	1,341	739	1,270	733
<b>Union status</b>				
Married	1,320	896	1,368	650
Common-law	424	234	389	211
Visiting	431	249	438	202
No longer in union	208	43	93	89
Never in union	10	-	-	-

<sup>1</sup>Includes 43 sterilized women no longer in union.

**Table 1.2** Frequency count of major subgroups of women by union status and selected characteristics

Characteristics	All women	Ever in union	Currently in union
<b>All women</b>	3,806	2,928	2,617
<b>Age (years)</b>			
15-19	683	169	139
20-24	745	508	450
25-29	745	671	624
30-34	543	519	469
35-39	441	427	389
40-44	370	359	312
45-49	279	275	234
<b>Education</b>			
Primary or less	1,757	1,546	1,423
Secondary or more	2,049	1,382	1,194
<b>Residence</b>			
Urban	1,690	1,348	1,172
Rural	2,116	1,580	1,445
<b>Ethnicity</b>			
Indian	1,787	1,546	1,210
Non-Indian	2,019	1,382	1,407
<b>Union status</b>			
Married	1,557	1,557	1,557
Common-law	514	514	514
Visiting	546	546	546
No longer in union	311	311	-
Never in union	878	-	-
<b>Religion</b>			
Roman Catholic	1,031	817	730
Other Christian	1,442	1,116	974
Hindu	1,030	768	705
Other non-Christian	303	227	208

**Table 1.3** Percentage of all women aged 20-49 years, who have ever used any method and specific contraceptive methods by age, 1977 and 1987

Method	Age group and years											
	20-24		25-29		30-34		35-39		40-44		45-49	
	1977	1987	1977	1987	1977	1987	1977	1987	1977	1987	1977	1987
Any method	53.4	56.1	77.9	77.2	82.5	81.2	76.1	81.0	72.3	77.3	56.2	71.7
Any modern method	49.7	51.9	73.8	73.8	78.3	78.5	72.8	78.2	63.5	74.3	47.5	68.5
Pill	30.5	32.5	54.1	51.3	56.4	58.4	49.0	60.8	38.5	57.3	24.3	47.0
IUD	1.3	5.2	4.2	10.7	9.5	14.2	12.3	12.9	11.3	14.6	9.7	13.6
Injection	0.1	4.2	0.9	6.4	5.1	10.3	9.0	12.2	8.9	9.6	6.6	6.5
Condom	35.8	32.2	49.9	44.2	56.1	52.3	43.8	50.3	36.8	44.6	24.0	32.3
Female sterilization	2.7	0.1	5.6	2.6	6.8	8.1	5.3	13.8	2.5	15.1	1.8	16.8
Safe period	9.6	7.9	14.1	8.7	15.9	12.5	12.4	10.4	14.9	13.2	12.1	14.3
Withdrawal	21.2	24.7	27.6	26.7	31.9	27.8	29.5	24.9	25.2	26.2	20.1	20.1

**Table 1.4** Percentage of all women in union aged 25-49, who are currently using any method and specific contraceptive methods, by age, 1977 and 1987

Age	Year	Specific method									
		Any method	Any modern method	Pill	IUD	Injection	Condom	Female sterilization	Perio- dic absti- nence		
									With- drawal	2.5	6.3
25-34	1977	59.6	56.4	23.4	2.4	1.4	17.0	3.3	3.3	2.5	6.3
	1987	55.2	48.0	17.1	5.4	0.7	13.7	5.5	2.1	4.7	6.0
35-44	1977	50.1	46.6	11.5	3.9	0.5	12.7	9.3	3.0	2.5	6.7
	1987	54.5	45.9	7.0	4.5	0.6	11.9	16.0	3.3	4.7	6.5
45-49	1977	28.1	25.2	5.0	2.0	0.0	5.6	7.3	1.3	2.3	4.6
	1987	36.3	30.3	0.9	2.6	0.0	6.0	17.9	4.3	1.3	3.3

**Table 1.5** Percentage of women in union, who were currently using a contraceptive method, by selected characteristics, 1977 and 1987

Characteristics	1977	1987
All women	51.3	52.7
Age (years)		
15-24	49.4	52.3
25-34	59.6	55.2
35-44	50.1	54.5
45-49	28.1	36.3
Education		
Primary or less	46.9	40.9
Secondary or more	56.9	57.3
Residence		
Urban	52.1	53.9
Rural	50.3	51.7
Ethnicity		
Indian	49.8	55.6
Non-Indian	52.4	50.1
Religion		
Roman Catholic	52.9	54.2
Hindu	48.4	56.7

**Table 2.1** Percentage of women ever in a union, who have ever used a contraceptive method, by selected characteristics of the women

Characteristics	Percentage ever used	Characteristics	Percentage ever used
<b>All ever users</b>	<b>81.7</b>		
<b>Age group (years)</b>		<b>Ethnicity</b>	
15-19	68.6	Indians	76.1
20-24	81.3	Non-Indians	86.7
25-29	85.7		
30-34	85.0		
35-39	83.6		
40-44	80.0	<b>Current union status</b>	
45-49	72.7	Married	84.8
		Common-law	82.5
		Visiting	78.9
<b>Education</b>		No longer in union	66.9
Primary <sup>1</sup>	79.2		
Secondary or more	84.8		
		<b>Religion</b>	
<b>Residence</b>		Roman Catholic	85.4
		Other Christian	80.7
Urban	84.0	Hindu	78.9
Rural	79.8	Other non-Christian	82.8

<sup>1</sup> Includes 32 women recorded as having had no formal schooling.

**Table 2.2** Percentage of ever-users of contraceptive methods, who have ever used specific methods, by selected background characteristics

Characteristics	Specific contraceptive methods									
	Pill	IUD	Inject- tions	Vaginal methods <sup>1</sup>	Con- dom	Female steril- ization	Male steril- ization	Periodic absti- nence	With- drawal	Other methods
All ever-users	66.9	14.6	10.1	26.4	58.1	9.5	0.5	14.0	36.1	7.4
<b>Age group (years)</b>										
15-19	42.2	4.3	-	15.5	52.6	0.9	-	6.9	57.8	7.8
20-24	57.9	9.3	7.4	24.2	57.4	0.2	0.5	14.1	44.0	6.7
25-29	66.4	13.9	8.3	26.8	57.2	0.3	0.2	11.3	34.6	7.0
30-34	71.9	17.5	12.7	27.4	64.4	10.0	1.1	15.4	34.2	6.1
35-39	75.1	16.0	15.1	27.5	62.2	17.1	0.6	12.9	30.8	8.4
40-44	74.1	18.9	11.9	29.0	57.7	19.6	0.3	17.1	33.9	7.3
45-49	65.5	19.0	9.0	28.0	45.0	23.5	-	20.0	28.0	10.5
<b>Education</b>										
Primary or less	68.8	14.6	12.4	26.0	56.8	12.8	0.2	6.2	30.6	8.0
Secondary +	65.2	14.6	7.5	26.7	59.4	6.0	0.7	22.5	33.3	6.7
<b>Residence</b>										
Urban	70.2	16.7	9.6	26.4	56.9	8.8	0.9	18.4	35.6	6.6
Rural	63.9	12.8	10.5	26.3	59.2	10.2	0.1	10.1	36.6	8.0
<b>Ethnicity</b>										
Indian	64.9	12.3	12.2	21.5	61.7	9.9	0.5	8.5	34.2	5.9
Non-Indian	68.5	16.5	8.4	30.2	55.3	9.3	0.4	18.3	37.6	8.5

<sup>1</sup> Includes diaphragm, foam, jelly, cream, and foaming tablets.

**Table 2.3** Percentage of women in a union, who are currently practicing contraception, by selected characteristics of the women

Characteristics	Percentage (N)	Characteristics	Percentage (N)
<b>All women in union</b>	52.7 (2617)		
<b>Age (years)</b>		<b>Union status</b>	
15-19	42.4 (139)	Married	57.6 (1557)
20-24	55.3 (450)	Common-law	45.5 (514)
25-29	53.8 (624)	Visiting	45.6 (546)
30-34	57.1 (469)		
35-39	55.8 (389)		
40-44	52.9 (312)		
45-49	36.3 (234)	<b>Union status standardized for age</b>	
		Married	57.5
<b>Education</b>		Common-law	45.2
Primary or less	48.9 (1423)	Visiting	45.1
Secondary or more	57.3 (1194)		
		<b>Religion</b>	
<b>Education standardized for age</b>		Roman Catholic	54.2 (730)
Primary or less	51.3	Other Christian	49.9 (974)
Secondary or more	58.8	Hindu	56.7 (705)
		Other non-Christian	56.7 (208)
		<b>Number of living children</b>	
<b>Residence</b>		None	31.8 (358)
Urban	53.9 (1172)	One	49.6 (468)
Rural	51.7 (1445)	Two	59.4 (612)
		Three	61.3 (451)
		Four or more	55.7 (733)
<b>Ethnicity</b>			
Indian	56.6 (1210)		
Non-Indian	50.2 (1407)		

Table 2.4 Percent distribution of current users according to specific contraceptive methods currently using, by selected characteristics

Characteristics	Number of users	Specific contraceptive methods									
		Pill	IUD	Injec- tions	Vaginal methods <sup>1</sup>	Con- dom	Female steril- ization	Male steril- ization	Periodic absti- nence	With- drawal	Other methods
All users	1422 <sup>2</sup>	26.4	8.5	1.5	9.4	22.1	16.0	0.4	4.9	10.1	0.8
Age (years)											
15-19	59	39.4	4.5	-	6.1	18.2	1.5	-	3.0	27.3	-
20-24	249	41.2	7.0	3.9	8.2	20.6	0.4	-	3.5	14.8	0.4
25-29	336	36.7	8.5	0.9	11.1	26.5	5.5	0.3	3.2	6.1	1.2
30-34	268	24.0	11.6	1.5	8.0	21.8	16.0	0.4	5.1	10.9	0.8
35-39	217	18.6	7.2	1.8	11.8	19.5	27.1	0.9	5.4	6.8	1.0
40-44	165	5.3	10.0	-	8.8	24.1	32.9	0.6	6.5	10.6	1.2
45-49	85	2.2	6.7	-	7.8	15.6	52.2	-	11.1	3.3	1.1
Education											
Primary or less	695	23.0	8.1	1.3	8.9	22.2	22.3	0.3	2.2	10.9	0.8
Secondary or more	684	29.9	8.9	1.7	9.8	22.0	9.6	0.4	7.5	9.2	0.9
Residence											
Urban	630	29.0	9.8	1.1	10.3	18.9	15.1	0.6	6.7	7.6	0.9
Rural	749	24.2	7.4	1.8	8.5	24.8	16.8	0.1	3.3	12.2	0.8
Ethnicity											
Indian	673	24.5	6.7	1.6	7.3	29.4	15.1	0.3	2.6	11.9	0.6
Non-Indian	706	28.3	10.1	1.4	11.2	15.3	16.9	0.4	6.9	8.4	1.1
Union status											
Married	896	21.4	8.8	1.8	8.6	26.5	17.2	0.2	4.5	10.4	0.7
Common-law	234	32.9	7.3	1.3	12.8	15.0	17.9	0.4	3.0	8.1	1.3
Visiting	249	39.0	8.0	0.8	9.2	15.3	7.6	0.8	8.0	10.4	0.8
Religion											
Roman Catholic	396	30.8	9.7	1.5	11.4	16.3	13.6	0.5	7.5	7.8	1.0
Other Christian	485	23.8	9.3	1.9	9.5	20.9	17.4	0.2	5.0	11.4	0.8
Hindu	400	23.8	7.9	1.2	8.4	27.5	16.7	0.5	2.7	10.8	0.5
Other non-Christian	118	31.1	3.4	0.8	5.0	28.6	16.8	-	2.5	10.1	1.7
Number of live births											
None	126	41.7	1.4	-	7.2	18.7	-	0.7	12.2	17.3	0.7
One	219	35.1	5.4	1.8	13.1	27.0	1.4	-	4.5	11.3	0.5
Two	353	32.4	10.4	1.7	6.5	25.4	7.6	0.3	5.6	9.9	0.3
Three or four	414	23.5	11.9	1.8	10.1	19.2	21.0	0.2	3.4	7.8	1.1
Five or more	267	8.5	6.6	1.2	10.0	20.1	40.2	0.8	2.7	9.3	1.5

<sup>1</sup> Includes diaphragm, foam, jelly, cream, and foaming tablets.

<sup>2</sup> Thirty-eight women, no longer in union and 5 never in a union were recorded as current users. These include 13 who had been sterilized, 10 who were using the pill, and small numbers using the other methods except injections and male sterilization. These women have been included in the overall total but are excluded from the subgroup totals.

**Table 2.5** Age-standardized<sup>1</sup> percentages of users who were currently using selected contraceptive methods, by selected characteristics (percentage differences from observed proportions shown in brackets)

Selected characteristics	Selected methods			
	Pill	Condom	Female sterilization	Withdrawal
<b>Education</b>				
Primary or less	26.5 (+ 15.2)	22.0 (- 0.9)	18.3 (- 17.9)	11.8 (+ 8.3)
Secondary or more	26.4 (- 11.7)	21.7 (- 1.4)	12.6 (+31.3)	8.2 (- 10.9)
<b>Residence</b>				
Urban	29.4 (+ 1.4)	18.9 (- 0.0)	14.9 (- 1.3)	7.5 (- 1.3)
Rural	24.1 (- 0.4)	24.7 (- 0.4)	17.0 (- 5.9)	12.3 (+ 0.8)
<b>Ethnicity</b>				
Indian	24.4 (- 0.4)	29.7 (+ 1.0)	14.4 (- 4.4)	12.0 (+ 0.8)
Non-Indian	28.2 (+ 0.4)	15.2 (- 0.7)	15.9 (- 5.9)	8.1 (- 3.6)
<b>Union status</b>				
Married	22.8 (+ 6.5)	26.6 (+ 0.4)	15.3 (- 11.0)	11.2 (+ 7.7)
Common-law	31.2 (- 5.2)	14.9 (- 0.7)	20.5 (+14.5)	7.7 (- 4.9)
Visiting	33.9 (- 13.1)	13.3 (- 13.1)	11.2 (+47.4)	10.8 (+ 3.8)
<b>Religion</b>				
Roman Catholic	29.7 (- 3.6)	16.2 (- 0.6)	14.2 (+ 4.4)	9.7 (+24.4)
Other Christian	24.5 (+ 2.9)	21.9 (+ 0.5)	16.4 (- 5.7)	16.9 (+44.7)
Hindu	23.4 (+17.5)	27.1 (- 1.5)	18.1 (+ 8.4)	18.4 (+70.4)
Other non-Christians	31.0 (-, 7.7)	27.7 (- 3.1)	19.5 (+16.1)	12.2 (+20.8)

<sup>1</sup> Age distribution of all women currently in union used as standard.

**Table 2.6** (a) Mean age at sterilization; (b) mean number of methods used before sterilization; and (c) the percentage of sterilized women who regret the operation, by selected characteristics

Characteristics	Number of women <sup>1</sup>	(a) Mean age at sterilization	(b) Mean no. of methods used before sterilization	(c) Percentage of women who regret the operation
<b>All women</b>	228	37.1	2.08	7.5
<b>Age (years)</b>				
Under 30	21	24.5	2.19	19.0
30-39	104	31.8	2.13	7.7
40-49	103	44.9	2.01	4.9
<b>Education</b>				
Primary or less	160	32.8	1.83	7.5
Secondary or more	68	39.9	2.68	7.4
<b>Ethnic origin</b>				
Indian	103	42.0	1.94	2.9
Non-Indian	125	33.0	2.20	11.2

<sup>1</sup> Includes 13 women no longer in a union. The majority of these women were 40 years of age or older. Table 4.9 on page 36 of the DHS Final Report shows the number of women who were sterilized as 207 with the median age at sterilization as 32.2 years, while Table 4.12 (page 38 of the DHS Final Report) gives the total as 228.

**Table 2.7** Percentage of nonusers of contraceptive methods, who intend future use, by selected characteristics

Characteristics	Percentage who intend future use <sup>1</sup>		Characteristics	Percentage who intend future use <sup>1</sup>	
<b>All women</b>	35.2 (2384)				
<b>Age (years)</b>			<b>Union status</b>		
15-19	38.7	(617)	Married	23.1	(661)
20-24	51.2	(488)	Common-law	23.9	(280)
25-29	44.5	(402)	Visiting	41.8	(297)
30-34	33.6	(268)	Single	42.5	(273)
35-39	21.8	(220)	Never in union	43.1	(878)
40-44	13.5	(200)			
45-49	2.6	(189)			
			<b>Religion</b>		
<b>Education</b>			Roman Catholic	38.1	(619)
Primary or less	26.0	(1038)	Other Christian	35.9	(956)
Secondary or more	42.0	(1349)	Hindu	30.9	(624)
			Other non-Christian	35.7	(185)
<b>Residence</b>			<b>Number of live births</b>		
Urban	36.2	(1029)	None	40.7	(1227)
Rural	34.3	(1355)	One	33.9	(286)
			Two	32.6	(288)
			Three to four	27.4	(310)
<b>Ethnicity</b>			Five or more	23.1	(273)
Indian	32.7	(1104)			
Non-Indian	37.2	(1280)			

<sup>1</sup> Numbers in brackets are the total numbers of nonusers.

**Table 3.1** Percentage of method users<sup>1</sup> in the last closed and open intervals, who discontinued the use of each method, by whether shifted to another method or ceased contraception

Method	Percentage of users who discontinued the method		
	Total	Shifted to another method	Ceased contracepting
Pill	49.1	23.1	26.0
IUD	54.4	31.9	22.5
Injections	87.7	61.5	26.2
Vaginal methods <sup>2</sup>	52.9	28.3	24.5
Condom	47.9	29.8	18.1
Periodic abstinence	54.9	27.2	27.7
Withdrawal	52.3	30.7	21.6
Other	82.6	60.9	21.7

<sup>1</sup> Excludes sterilization.

<sup>2</sup> Includes diaphragm, foam, jelly, and foaming tablets.

**Table 3.2** Percentage of women who were contraceptive users in the last closed and open intervals, who discontinued the use of a method, by characteristics and by whether shifted to another method or ceased contracepting altogether

Characteristics	Total	Percentage of contraceptors <sup>1</sup> who discontinued a method	
		Shifted to another method	Ceased contracepting
<b>All women</b>	<b>54.7</b>	<b>26.9</b>	<b>27.8</b>
<b>Age (years)</b>			
15-19	58.5	31.1	27.4
20-24	58.7	29.5	29.2
25-29	55.5	22.7	32.8
30-34	51.9	23.9	28.0
35-39	50.8	27.1	23.7
40-44	54.5	27.4	27.1
45-49	55.0	23.8	31.2
<b>Education</b>			
Primary or less	52.7	25.1	27.6
Secondary or more	56.8	28.7	28.1
<b>Residence</b>			
Urban	57.1	29.2	27.9
Rural	52.6	24.8	27.8
<b>Ethnicity</b>			
Indian	51.0	28.9	22.1
Non-Indian	57.7	25.3	32.4
<b>Union status</b>			
Married	47.5	21.9	25.6
Common-law	54.2	21.9	32.3
Visiting	68.9	48.7	20.2
No longer in union	95.7	18.3	76.9

<sup>1</sup> Includes sterilized women.

Table 3.3 Distribution of women who switched contraceptive methods in the last closed and open intervals, according to methods, from and to which shifted

Method shifted from	Number of method shifters							Method shifted to					
	Pill	IUD	Inject-	Vaginal	Male	Periodic	With-	steril-	abstin-	With-	Other		
			tions	methods	Condom	ization	steril-	steril-	ence	drawal			
All methods	615	165	66	24	76	118	55	3	36	66	6		
Pill	187	-	30	8	32	49	25	1	18	23	1		
IUD	44	17	-	-	8	4	6	1	3	5	-		
Injections	40	13	3	-	1	11	6	-	1	5	-		
Vaginal methods <sup>1</sup>	66	24	6	3	-	22	2	-	5	4	-		
Condom	178	76	20	9	22	-	14	1	7	26	-3		
Periodic abstinence	25	7	3	1	3	9	-	-	-	2	-		
Withdrawal	61	21	4	2	7	22	1	-	2	-	2		
Other	14	6	-	2	3	1	1	-	-	1	-		
Net loss (-) or gain (+)	-22	+22	-16	+10	-60	+55	+3	+11	+5	-8			

<sup>1</sup> Includes diaphragm, foam, jelly, and foaming tablets

Table 3.4 Probability of users of each method shifting to each other method in the last closed and open intervals

Shift from	Shift to specific methods										
	Any other method	Pill	IUD	Inject- ions	Vaginal methods	Condom	Female steril- ization	Male steril- ization	Periodic abstin- ence	With- drawal	Other
Any method	.2086	.0836	.0241	.0084	.0288	.0529	.0202	.0010	.0128	.0246	.0021
Pill	.1920	-	.0308	.0082	.0329	.0503	.0257	.0010	.0185	.0236	.0010
IUD	.2157	.0833	-	-	.0392	.0196	.0294	.0049	.0147	.0245	-
Injections	.4494	.1461	.0337	-	.0112	.1236	.0674	-	.0112	.0562	-
Vaginal methods	.2136	.0777	.0194	.0097	-	.0712	.0065	-	.0162	.0129	-
Condom	.2486	.1061	.0279	.0126	.0307	-	.0196	.0014	.0098	.0363	.0042
Periodic abstinence	.1953	.0547	.0234	.0078	.0234	.0703	-	-	-	.0156	-
Withdrawal	.2302	.0792	.0151	.0075	.0264	.0836	.0038	-	.0075	-	.0075
Other	.4828	.2069	-	.0690	.1034	.0345	-	-	.0345	-	-

**Table 3.5** Percentage of contraceptive users in the open interval, who ceased contraception in that interval, by characteristics of the women

Characteristics	Drop-out rate	Characteristics	Drop-out rate
All women	24.5	Residence	
Age (years)		Urban	25.6
		Rural	23.6
15-19	23.3		
20-24	22.6		
25-29	23.8		
30-34	21.7	Ethnicity	
35-39	23.5	Indian	20.5
40-44	26.1	Non-Indian	27.9
45-49	38.4		
		Union status	
Education		Married	20.1
		Common-law	23.8
Primary or less	26.5	Visiting	36.2
Secondary or more	22.4	No longer in union	33.8

**Table 3.6** Percent distribution of discontinuations of selected contraceptive methods in the last closed and open intervals, according to length of use before discontinuation

Selected methods	Length of use (months)			
	<3	3-5	6-11	12+
Pill	14.2	13.6	8.9	63.2
IUD	14.4	7.8	16.7	61.1
Vaginal methods	34.5	9.8	15.5	40.2
Condom	24.5	12.6	11.5	51.4
Withdrawal	27.5	14.8	14.1	43.6

**Table 3.7** Percent distribution of women who discontinued the use of specific contraceptive methods in (a) the last closed and (b) open intervals, according to main reasons for discontinuation

**(a) Last closed interval**

Methods	Number of women	To become pregnant	Partner dis-approved	Reasons for discontinuation					
				Health concerns	Access difficult	Cost	Inconvenience	In-frequent sex	Other
All methods	649	43.3	3.5	19.0	5.4	0.6	3.4	3.4	8.0
Pill	254	41.3	0.4	34.3	5.5	1.2	-	3.5	8.7
IUD	26	19.2	-	46.2	-	-	3.8	-	3.8
Injections	28	21.4	-	46.4	-	3.6	3.6	3.6	26.9
Vaginal methods	78	35.9	3.8	7.7	6.4	-	6.4	10.3	14.1
Condom	178	53.9	7.9	2.8	9.0	-	7.3	0.6	7.3
Periodic abstinence	25	60.0	4.0	-	-	-	4.0	-	-
Withdrawal	49	42.9	4.1	-	-	-	2.0	4.1	4.1
Other*	11								

\*Number too small for useful distribution

**Table 3.7** Percent distribution of women who discontinued the use of specific contraceptive methods in (a) the last closed and (b) open intervals, according to main reasons for discontinuation, continued

**(b) Open interval**

Methods	Number of women	Reasons for discontinuation									Don't know/not stated
		To become pregnant	Method failed	Partner disapproved	Health concerns	Access difficult	Cost	Inconvenience	In-frequent sex	Change to permanent method	
All methods	898	7.2	5.3	5.3	36.9	3.2	0.8	8.1	13.8	4.3	12.1
Pill	355	4.5	0.8	0.6	64.2	4.2	0.3	1.1	11.0	2.8	8.7
IUD	63	12.7	9.5	-	60.3	-	-	-	4.8	3.2	4.8
Injections	40	12.5	-	-	75.0	12.5	-	-	-	-	-
Vaginal methods	101	7.9	4.0	3.0	16.8	1.0	3.0	23.8	7.9	4.0	22.8
Condom	218	6.0	8.3	17.9	6.4	3.7	0.5	12.4	17.9	8.7	15.6
Periodic abstinence	36	16.7	5.6	-	-	-	-	22.2	36.1	-	13.9
Withdrawal	77	11.7	19.5	5.2	3.9	-	-	13.0	26.0	5.2	13.0
Other*	8										2.6

\*Number too small for useful distribution

The research project reported on in this issue is "Contraceptive Methods: Preference and Change among Women in Trinidad and Tobago." For further information on this work, write to the principal investigator, Norma Abdulah, Institute of Social and Economic Research, The University of the West Indies, St. Augustine, Trinidad.

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